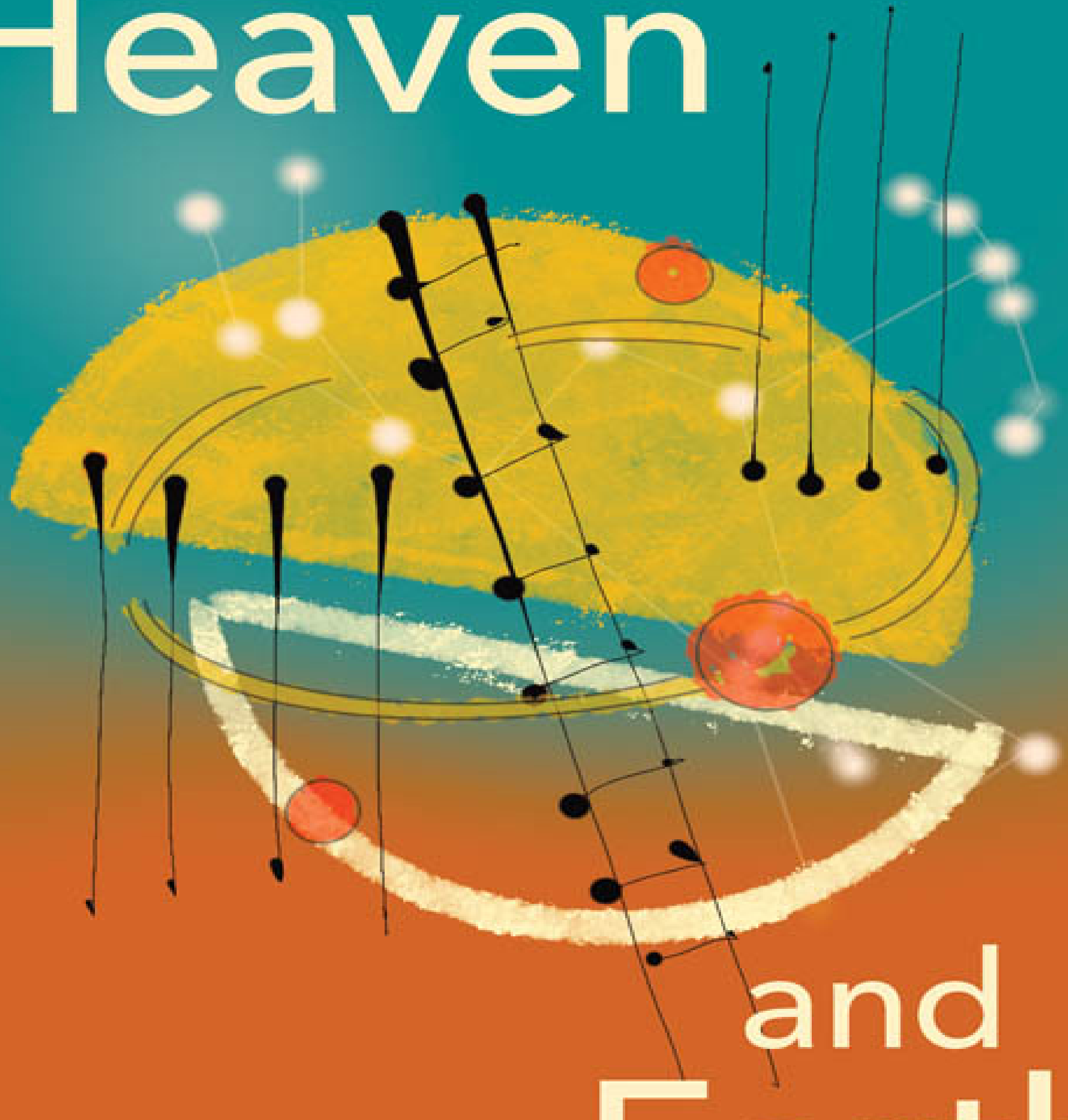
Beyond Heaven and Earth



A Cognitive Theory of Religion

Gabriel Levy

Beyond Heaven and Earth

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For my parents, David and Margaret Levy

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Preface

Twenty or so years ago, fresh out of my undergraduate studies at Dartmouth, I had the extraordinary opportunity to spend two summers in a row doing fieldwork on the north coast of Papua New Guinea, thanks to the anthropologist Robert Welsch, who organized the trip. We were studying the impact of a deadly tsunami that had hit the coastal communities there, trying to see how they understood this event and how it affected their religious beliefs and practices. The people were very kind after I severely sprained my ankle trying to look cool playing basketball. There was not much knowledge I had from my four years of undergraduate education that impressed them. However, on one very clear evening while resting my ankle, I told them what I knew about the night sky. As I was speaking, I realized they were completely captivated by my story. They were all ears as I explained what I knew (which was actually quite basic) about astronomy. I remember telling them the very counterintuitive notion that those lights in the sky are actually burning hot fire balls incredibly far away. As I told them, I realized this was an extravagant and strange story. It might as well have been fiction. They seemed to be entertained by the fact that it was so fanciful. Since that time, I have been trying to understand what it was about that information in the night sky that was so important for them. I think it comes down to the fact that all human beings share an interest in this kind of natural information.

What I have learned since then is that religion partly concerns this type of heavenly information, just like it concerns earthly tsunamis. But the information religions contain in narrative media is not simply heavenly or earthly; it is beyond heaven and earth.

Fast-forward two decades. I was having a Shabbat dinner one night with a group of people at the synagogue in Trondheim, Norway. One woman I know asked me why we put salt on the challah (bread) before we eat every Sabbath. As the resident scholar of religion and expert on Judaism, I was presumably supposed to know the answer. On that particular occasion, the reason slipped my mind, so I said, “I don’t know.” She seemed shocked. Wasn’t this something I was supposed to know?

I am sure this happens to agnostic scholars of religion all the time, where we are somehow supposed to be representatives (or “caretakers”) of religion for people outside academia or our fields. But I was confused. She was asking me why *she* was performing the behavior. She wanted me to tell her a story about why she was doing it; she wanted me to tell her what we believe. But wasn’t this something she should know? Shouldn’t one generally know why one does things and what one believes?

As ritual experts have been saying for a while now, with religion and rituals we often behave in certain ways without necessarily knowing the reason. Overarching narratives, especially religious ones, often fill the gaps between reasons and actions. Such gap-filling applies to mundane things like encouraging us to put the salt on bread, but it also includes deeper things, like how narratives on Netflix and HBO, for example, encourage us to interact and be intimate with our friends and loved ones in specific ways.

This book is not about Judaism, but I do maintain that something like the rabbinic method is a good way to try to understand why we believe and behave in certain ways. Briefly put, within that method there is not one answer; we believe and behave in ways that are always contextual, the reasons immanent. As some philosophers have noted, the rabbinic method seems to work well with the standpoint I favor throughout this book inspired by the philosopher Donald Davidson. The idea is that religious language has a life of its own.

My education has come from two diametrically opposed realms of academic culture, each offering its own narrative for the best way to study religion. In graduate school at the University of California, Santa Barbara, the narrative was mostly from continental philosophy and critical theory. Religion is best understood as connected to the discourse of politics and power. In my postgrad work I was stationed in Aarhus, Denmark, in the heyday of “cognitive science of religion” when that field was less splintered. There the leading idea was that we can explain religion using natural science. Religion has to do with evolution. In both places I felt myself always pushing against their narratives, probably because of my undergraduate training at Dartmouth, where I was exposed to the more “analytic” idea that language is the key to understanding religion. But what is language?

Eventually, I learned that through my interest in religious language I could go beyond those two supposedly opposing narratives, but this would be a difficult task and would require a revision of how we presently conceive of the split between humanities and the natural sciences. This book is largely the product of that effort. As for the woman who asked me about the salt, the main answer is that we have to see her as choosing to put salt on the challah because she wants to. It turns out that she makes this choice and has such an intention partly because of the power that institutions and their narratives hold over us and partly because she is a human animal. We can bring these explanations together and reconcile them, but there will be limits.

Introduction: You Can Lead a Horse to Water

For the past few decades I have been working with a group of scholars in the study of religion who are trying to bring Donald Davidson's philosophy, a form of pragmatism known as anomalous monism, to bear on religion. This book represents the culmination of my efforts in that direction. My central argument is that religious language is part of nature and to study it we need an approach that integrates natural-science and humanist approaches in the right way. I argue that an appreciation of Davidson's philosophy provides a fruitful way to understand the relationship between so-called scientific and humanistic approaches, and the limits of that relationship. Davidson's anomalous monism gives us the rules of engagement; it guarantees that neither approach can absorb the other, and it spells out why this is so.

I argue that more interdisciplinary work between the humanities and natural sciences should be carried out, but in order to do so this requires both making the dominant metaphysics that undergird the various disciplines of science and humanities more explicit and rejecting those that maintain naïve monisms and simplistic dualisms. This point is based on Davidson, who argued that reality is metaphysically one but because of the limits of language and human vocabulary must be described in at least two radically distinct ways: in terms of the mental and in terms of the physical or material. For this reason, the relation between the mental and material cannot be bridged in lawlike ways. This grounding assumption opens the door for both humanistic pursuits and naturalist pursuits to be run in parallel, as long as we understand that there is a dynamic or nonlinear relation between the two. I thus offer a blueprint for one way in which the humanities and natural sciences can have a mutually respectful and productive conversation.

I regard this as an urgent problem, because in recent years these academic cultures have only become more estranged. At the broadest level, this book is meant for readers interested in bringing the humanities and natural sciences together in ways that are not demeaning to or naïve about the other side. More narrowly, it is for readers interested in religion, and most narrowly for the core group of scholars interested in pragmatism and religion.

Davidson's philosophy is useful in this regard because he views the concept of truth as belonging to the intersubjective, dialogical level of communication. Truth is negotiated through conversations. In the course of the conversations throughout this book, I argue that in order to understand religions we have to take their semantic content seriously. Within the anomalous monist framework, and also allied versions of pragmatism such as neutral monism, in order to make sense of religious language in this nonreductive way, we have to rethink basic concepts such as narrative fiction, information, agency, creativity, technology, and intimacy. These concepts are the subjects of the chapters that follow.

There is a famous story in Parshat Noaḥ about the Tower (*migdol*) of Babel in the biblical book of Genesis, chapter 11. The story recounts some of the early struggles between gods and humans, and describes how the creator god is stressed by his own creation. Because it is so interesting, many commentaries on this story have been written over the years (see Kramer 1968; DeWitt 1979; Brueggemann 1982; Derrida 1991; Walton 1995; Seely 2001; Hiebert 2007; James and van der Sluijs 2008; Strong 2008; Kugel 2009; LaCocque 2010; Sherman 2013; Giorgetti 2014; Sherwin 2014; Keating 2016). Within the narrative of Genesis, the story comes just after Yahweh saves only Noah and his family among the humans from destruction in the flood. Yahweh has just killed most of the living things on earth, including presumably the Nephilim, the offspring of divine beings (*ḇᵉne-hāʾᵉlōhim*) who cohabited with the daughters of men (Gen. 6:4). In these stories in Genesis, Yahweh has a persistent worry that sentient life, and in particular humans, will pose some sort of challenge to his and the other divine beings' authority. Yahweh is also regretful and sad:

וַיִּנָּ֣חֶם יְהוָ֔ה כִּֽי־עָשָׂ֥ה אֶת־הָֽאָדָ֖ם בָּאָ֑רֶץ וַיִּתְעַצֵּ֖ב אֶל־לִבּֽוֹ׃

"Yahweh regretted that he made humans on earth; his heart pained." (Gen. 6:6)

Following the flood, Yahweh sets up a covenant with human beings (Gen. 9), encouraging them to be fruitful and multiply, and he promises never again to doom the earth because of human beings. It is just after this point, after the biblical text enumerates the descendants of Noah, that we run into another challenge to Yahweh in Genesis 11.

At this point in time, everyone has the same language. At a settlement in a valley in the land of Shinar (*šinʿār*), in order to avoid being "scattered all over the earth," these folks decide to build a city and a tower with its top in the heavens (*wᵉrōʾšô ḇaššāmayîm*) and thus to "make a name for themselves" (*wᵉnaʿᵃ śê-lānû šem*). Though they wished to avoid being scattered, this is exactly what happens after Yahweh comes down (11:5) and sees what they are doing. Once he sees what they are doing, he seems to get very worried. He says:

הֵן עַם אֶחָד֙ וְשָׂפָה אַחַת֙ לְכֻלָּם וְזֶה הַחִלָּם לַעֲשׂוֹת וְעַתָּה֙ לֹא־יִבָּצֵר מֵהֶם כֹּל אֲשֶׁר יָזְמוּ לַעֲשׂוֹת׃

> "If as one people with one language this is what they begin to do, then nothing they propose will be impossible." (Gen. 11:6)

To avoid the challenge, Yahweh goes down and "mixes" or confounds (בָּלַל/*bālal*) their speech so that they cannot understand one another. He also scatters them over all the earth. Thus, the exact fear they had that began the whole enterprise is realized. The Bible records that this is why that place (in the land of Shinar) is called Babel, referring to the play on words that *bālal* and Babel sound similar.

Aside from giving an account of why there are so many human languages, why a place to the east is called Babel and possibly has remains of a giant tower, the story is also a warning not to come too close to Yahweh. It posits a clear differentiation between humans and gods (*ʾᵉlōhim*). We are never explicitly told why Yahweh is so protective of his status, but this structure reaching into the heavens clearly threatens him in some way.

The rabbis also thought a lot about this story. A discussion about it is recorded in the Babylonian Talmud, tractate Sanhedrin 109A. The general topic in this part of the tractate concerns *Ḥeleq*, discussions about those who will have (no) portion (חלק) in "the world to come" (עולם הבא), in the afterlife. The "generation of the dispersion" (דור הפלגה), the name the rabbis give for those who tried to build the tower and were dispersed, is the second group listed who, according to the Mishna, have no share. This brings the rabbis to the topic of the tower builders. The Gemara asks, “What did they do that was so bad?” (מאי עבוד).

The Talmud records that scholars from the academy of R. Shela in Nehardea (located in what is now central Iraq) thought that the tower was built in order to strike the sky with axes so that water would flow. Rabbis in the west laughed at this interpretation and asked, If that was the case, why would they build the tower in a valley, which would defeat the purpose?

Another “answer” comes from R. Yirmiyah bar Elazar. The builders of the tower split into three groups with different objectives. The first group wanted to live up on the tower, the second group wanted to worship idols on it, and the third wanted to wage war from it. According to this tradition, Hashem (God) dispersed the first group, confounded the language of the second group, and transformed the third group into beasts and unearthly creatures of various kinds.

A third teaching comes from R. Nathan, who says that *all* the members of that generation wanted to build the tower for the purpose of idolatry. That is, they wanted to make a name (*šem*) for themselves. According to this teaching, making a name refers back to idolatry in Exodus 23:13, where Hashem (God) jealously tells Moses not even to mention the names of other gods.

The discussion of the tower ends with a tradition from R. Yochanan, which states that a third of the tower was burned, a third swallowed up, and a third remains. The Talmud reports that all around that area in Babylon, associated with the place names Bavel and Bursif, it is still difficult if not impossible to study (Torah) because of what happened there.

More than a thousand years later, the author Ted Chiang has retold the tale, or remixed it, in his short story entitled “Tower of Babylon” (Chiang 2016). Chiang is the author of the novella on which the film *Arrival* (2016) is based, which I will discuss in chapter 4. His magical realist version of the Babel story zooms in on the people building the tower. Building takes hundreds if not thousands of years. There is a constant flow of goods up and down the tower, which takes almost two months to summit—even more if one is carrying bricks or other materials. The story centers on a miner named Hillalum who has been hired because once the tower reaches the vault of heaven, they will no longer need stonemasons but miners to break through.[1] After months of ascending, during which Hillalum meets communities that live within the tower and in fact have never been down to earth, he and the other miners reach the top. With help from Egyptian miners, they must be very careful breaking through the vault of heaven, lest they puncture one of the reservoirs that holds rainwater. Eventually Hillalum has mined so far up that he and the few others with him actually hit a reservoir. Instead of being pulled downward, he is sucked upward. Somehow he manages to survive and finds himself back down on earth: "He had climbed above the reservoirs of heaven, and arrived back at the earth" (Chiang 2016, 27). How was this possible?

> Somehow, the vault of heaven lay beneath the earth. It was as if they lay against each other, though they were separated by many leagues. How could that be? How could such distant places touch? Hillalum's head hurt trying to think about it….
>
> And then it came to him: *a seal cylinder*. When rolled upon a tablet of soft clay, the carved cylinder left an imprint that formed a picture. Two figures might appear at opposite ends of the tablet, though they stood side by side on the surface of the cylinder. All the world was as such a cylinder. Men imagined heaven and earth as being at the ends of a tablet, with sky and stars stretched between; yet the world was wrapped around in some fantastic way so that heaven and earth touched. (28)

Hillalum realized this was why God let them build the tower; it was, after all, not a challenge to his authority. All that work would not reveal more to them about creation than they already knew. In this way they would learn their place. The world is a seal cylinder, not a tablet (see figure I.1).

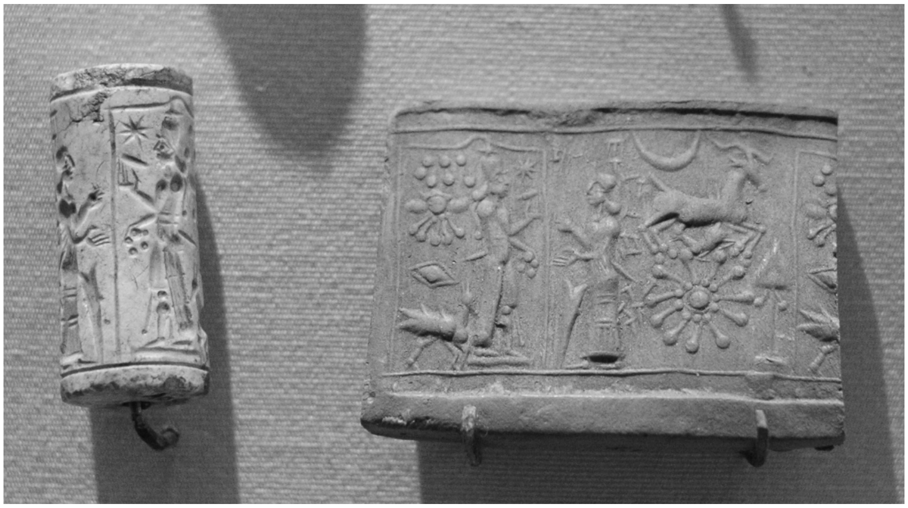

Figure I.1
The worship of the sun god Shamash. Limestone cylinder-seal, Mesopotamia.

The various traditions about and retellings of the story of the tower make clear that it is a narrative about knowledge and information. The heavens carry information. For lack of better words, we can call it natural information. The heavens are alive. For most of the history of life on earth, organisms were not aware of the information. At a certain point in the history of life some organisms on earth became aware of that natural information and began to make use of it. By paying attention to it, they were then able to orient themselves, to navigate more accurately in both time and space, thus gaining more control over their environment (Pimenta 2015). Such knowledge was passed down and thus remembered by telling stories and singing songs about the heavenly characters. Of course, other things worth remembering were also passed down, but this information was some of the most important.

Once human beings started settling down, building technologies like towers made such spatial and temporal orientation even more precise. Sacred sites such as Stonehenge, Göbekli Tepe, or the Egyptian pyramids attest to the fact that in ancient times most large structures were built with the heavens in mind. This is also part of the background for understanding the story of Babel in Genesis. A strong current in Judaic theology saw such focus on the heavens as a form of idolatry. Those agents in the night sky—the stars, planets, and constellations—were not important, but rather owed everything to the one true god.

Metaphysics Matters

These stories apply to modern times. Hard-science investigations into religion in recent years, the field of research known as "cognitive science of religion" (CSR) foremost among them, have climbed to similar heights, but I am afraid that, like Hillalum, they are not much further along than where they started. Perhaps this is because they started with the wrong ideas about the content of religion. The wrong ideas are probably the result of misguided metaphysics, by which I mean the core assumptions about the nature of reality that make theories possible. It is usually hard to know whether their core assumptions are misguided, though, because most scientists do not make their metaphysics explicit.

When we turn our attention to human level phenomena like religion, we need a background metaphysics with a robust attitude to meaning. A science of religion, or any science that looks into meaningful phenomena, cannot work in the exact same way as natural science because of the simple fact that we cannot stand outside our meaning-making practices. When we try to do so, it will distort that which we wish to understand.

A central aim of approaches like CSR has been to reconcile, in the sense of “consilience” (see Slingerland and Collard 2011; Slingerland and Bulbulia 2011; Slingerland 2014), methods and theories from the natural sciences with research on religion. Though religion is defined in various ways, it is usually understood as a universal human phenomenon. By this, researchers do not necessarily mean that religion is innate but that, as with all universal human phenomena, there will be an evolutionary story to tell about how it, or its constituent elements, came about (Taves 2009). The stories are usually about the phenomena of religion writ large, variously defined, rarely reaching the granularity to make claims about specific historical and cultural circumstances where religion is most relevant to people on the ground.

For the most part so far, consilient approaches to religion like CSR are principally psychological in nature. Put simply, the idea is that human minds are the result of evolutionary and other natural processes, so learning something about these processes should tell us something about human psychology. At the same time, if religion has to do with human psychology, then researching these processes may give us insight about the origin and development of religion over time. If the mind is part of nature, it would also call for a naturalistic approach to religion that more and more has imported rigorous experimental methods from other sciences (Sørensen and Nielbo 2013).

The version of consilience adopted by CSR—and by most fields like it that claim some integration of natural sciences and humanities—is mostly one-way. Little effort is made to bring in research from religious studies, or the humanities more broadly, to inform methods and theories in the natural sciences.

Further, an implicit metaphysics of materialist or physicalist monism undergirds such cognitive approaches, as it does for much of the natural sciences. Critics usually frame this metaphysics in terms of reductionism, but this criticism rarely hits the mark, because all scientific theories are reductionistic in one way or another (Cho and Squier 2008; Slingerland 2008b; Xygalatas 2010). Reduction is actually the aim of an approach like CSR.

The metaphysical critique would have to go a bit deeper by saying that there are implicit, unjustified assumptions about the nature of reality built into *all* methods and theories. Unfortunately, scholars in CSR and related disciplines that take a consilience approach rarely ever make their metaphysics explicit, thinking that it is unnecessary or irrelevant. Most think their implicit metaphysical assumptions make no difference to their work as empirical scientists. So not only are they not aware, but they purposefully avoid the vulnerable process of thinking about metaphysics. This is a mistake.

So the two horns of the problem I am pointing out about metaphysics are (1) that natural-science approaches to a subject like religion rarely make their metaphysics explicit, and (2) when the metaphysics is made explicit, it often turns out to be philosophically naïve. I provide some examples of metaphysical thinking gone awry, or just gone, in chapter 2. It is not enough to say that the foundational metaphysical assumption of the natural sciences is materialism and leave it at that, because there are indeed different types of materialism.

I suggest in this book that there are alternatives to both implicit and bad metaphysics. For instance, consider the more pragmatically inclined versions of metaphysics, like William James's neutral monism, recently updated by Thomas Nagel, or Donald Davidson's anomalous monism. For different reasons, both accept that reality is indeed made of one thing but that it will ultimately be impossible to bring mind and matter together, either because there is a third neutral term (for James and Nagel), or because of the constraints on the vocabularies of these domains (for Davidson). For the latter, this ontological monism coupled with a conceptual dualism was why Davidson did not think a completely "scientific"—meaning physicalist—psychology will ever be possible (chapters 11 and 12 in Davidson [1980]).

I think these pragmatic monists are right, which does not mean we should abandon efforts at integrating the natural sciences and humanities; it just means that neither offers the whole story and that consilience is limited. For Nagel, it means that our thoughts are as real as atoms or other physical things. For Davidson, it means that the semantic content of our thoughts is real.

Davidson thus gives us the tools to take the semantic content of religion more seriously. I am convinced that one cannot explain or understand religion or any psychologically related human phenomenon without taking this type of content into account. If someone thinks the semantic content can be ignored, they are missing the core of the phenomenon. The semantic content is found when people communicate and attribute meaning. From the Davidsonian perspective, such communications are actions whereby we attribute to other creatures “propositional attitudes.” Without such attributions, we would never know we are talking about religion.

As Nancy Frankenberry puts this point, “There is no distinguishable religious context that can be discerned apart from people’s propositional attitudes” (2007, 286). In other words, propositional attitudes such as beliefs, expectations, and desires are where we find religion. The point is that as scholars or scientists of religion, if we try to remove these attitudes by reducing them to something else, or remove them by ignoring the content of their propositions, then we are no longer studying religion.

Removing relevant attitudes and ignoring content is a mistake most purely materialist monist accounts of religion make, including both hard science and the deep-discourse humanist accounts of religion that have recently become popular (Lyden 2003; Fitzgerald 2003, 2014; McCutcheon 2003; Dubuisson 2007; Masuzawa 2007; Taira 2013). In the latter, “religion” has no content; it is merely a name that people give to things to exert personal, political, or institutional power. From that perspective, scholars of religion should not study the content of anything called religion. Rather, they should study the sociology and politics behind those discursive acts of naming. The paradox is that such scholars actually *do* study content—namely, the discursive content of those acts of naming—just not the content of religions. So in both cognitive science and some humanist approaches, the semantic content of religion becomes epiphenomenal.

As in hard-science approaches, in discourse-oriented approaches there is often an underlying implicit metaphysics that is never justified. In CSR, physical things are real, while in deep discourse the content of the acts of naming are real. But in both, the semantic content or meaning of religion is window dressing. Thus, my core criticism of both is that they do not actually study or explain religion. I challenge all scholars and scientists of religion to make their metaphysics explicit. If they cannot, they should try harder to figure out how to do so.

Based on this core criticism, in this book I flesh out the consequences if we adopt a metaphysics different from those that are only *implicit* in the aforementioned theories of religion. The explicit metaphysics I endorse is that of anomalous monism, but other dual-aspect versions—such as neutral monism—also mostly work. Taking this approach will change how we study religion (Rorty 1987; Frankenberry and Penner 1999a, 1999b; Jensen 1999, 2011; Schilbrack 2002; G. S. Davis 2005; Knight 2008; G. Levy 2012; Neville 2016; Godlove 2016; Gardiner 2016; Frankenberry 2018). This book presents a groundwork for this approach and some of its consequences.

The basic metaphysical-methodological cornerstones for this perspective are grounded in the rejection of the "four dogmas of empiricism" (Frankenberry and Penner 1999b; G. Levy 2012, 150). The rejection of the first two dogmas was given originally by W. V. Quine, while Davidson then added a third, and Wilfred Sellars a fourth (Quine 1951; Davidson 1974; Sellars, Rorty, and Brandom 1997).[2]

The first dogma to be rejected is the distinction between analytic and synthetic descriptions. Quine did not buy into the distinction between so-called truths of reason and truths of fact. Quine added a related second dogma, known as the principle of reductive verification, or verificationism; he argued this dogma was based on the mistaken idea that individual sentences can correspond neatly to the world.

Davidson's addition of a third dogma was an expansion and partial critique that Quine did not go far enough with the first two: not only is there no clear distinction between truths of reason and truths of fact, but the whole idea of an overarching conceptual scheme that organizes some sort of content (including both empirical and semantic content) is flawed. In other words, we generally cannot distinguish language (schemes) from experience (content); schemes and contents are forever mixed up with one another. The fourth dogma, following from and in a mutual relation to the third, was that the very idea of pre-theoretically given content (such as "experience") is flawed. This is known as the myth of the given (Frankenberry and Penner 1999b).

In the pages that follow, I focus on the rejection of the third and fourth dogmas and its consequences. Davidson's rejection of the third dogma led to a nuanced position that left him somewhere between correspondence and coherence theories of truth, theories about the relation between language and the world. In other words, for Davidson a sentence is true partly because it corresponds to the world and partly because of its relation to other sentences (Davidson 1986a). Going too far in one direction or the other leads to problems. Deep-discourse theorists and most humanists go too far in the direction of coherence. For these folks, there is no correspondence between a word, say "religion," and the world. Since this word does not neatly correspond to anything in the world, they say we should rather study the socioeconomic and political process behind invoking such a word (see Riesebrodt 2010, chapter 1).[3]

Natural science-based approaches have the opposite problem: they go too far in the direction of correspondence, tending to take language as a mirror of nature (Rorty 1979a), where the only thing they are interested in is the way a word, say "God," does or does not correspond to nature. Such approaches to religion envision a world where words simply do or do not refer to something in the world, and there is no messiness with regard to the socioeconomic and political processes behind those words. Like the misguided builders of the Tower of Babel, they wish for one language.

The failure to understand the intersubjective nature of semantics in both approaches leads them to think that the meaningful content of words, and more importantly of sentences composed by the words that agents utter in context, do not really matter. This has been preamble to say that though there are problems, I think there is a path that can retain the good things from both hard science and critical approaches to religion in line with a more responsible alternative monist metaphysics. The path goes through Davidson.

Davidson, Core Aspects

Aside from the noted four dogmas of empiricism that Davidson rejects, the main pillars of his holistic approach that I rely on as background throughout the book are anomalous monism, radical interpretation, and the Principle of Charity. Volumes have already been written about each of these topics, with critiques, responses, and various rejoinders (Hahn 1999; Evnine 2001; LePore and Ludwig 2009, 2013; Malpas 2011). I will not rehash debates from the analytical philosophy of language and mind in these pages. I have previously published extensively about how these subjects relate to religion and the study of religion (G. Levy 2010, 2012, 2014, 2018).

But a brief summary, preferably as free from jargon as possible, is still in order. Before discussing these terms, I want to stress that they come within a background of Davidson's holism. I agree with Mark Gardiner that the simplest way to understand his holism is that "the unit of interpretation is total behavior" (Gardiner 2016, 289). From this perspective, if you want to understand the meaning of someone's verbal or nonverbal behavior, ideally you do so in the context of their total behavior. Observing someone's total behavior is not really possible, so preferably you do so in the context of as much of their behavior as possible. As I understand it, this move is critical for understanding religion, a particular kind of meaning-making behavior. The same, for better or worse, applies to your understanding of the inscribed utterances in this book.

Davidson's holism is forward looking since, ideally, in attributing meaning to someone, one must look at that person's total behavior. In this way, the interpretive process is never finished because new information about the total behavior is potentially always coming in. This point places Davidson firmly in line with his mentor Quine and the other logical pragmatists. The focus on future interpretation and the *pragma*, or action, is central to understanding Davidson as a pragmatist.

Anomalous monism has five core aspects. The first is its behavioral psychology. It is a form of relatively strict behaviorism coupled with what are called "transcendental" (Rorty 1979b) primitives of a minimalist psychology. Observing the behavior of agents around us, including but not exclusive to making sounds and gestures, is the central means whereby we understand what they mean. However, behavior alone is insufficient to the task. Davidson's contribution was describing particular primitive concepts without which he did not think semantic interpretation would be possible.

The concepts of "little *t*" truth and error are the most important primitives for Davidsonian semantics. These concepts are dubbed transcendent because they are simply postulated a priori*,* as the logical core of the system (the system of meaning). They are just there, part of the system from the start, because for Davidson a semantic system could never get off the ground without them. In this book I take that point to an extreme, but I hope not an unwarranted one, asking the question where and how transcendental primitive concepts arise. Despite critics such as Michael Dummett (1993) pressing him on these points, Davidson rarely speculated on the answer (Davidson 1994b, 1999).

In order for us to understand any information as carrying semantic meaning—for example, in order to understand the speech of another human being—we implicitly assume that their use of the concept of “little *t*” truth will largely match our own. In other words, in order for semantic communication to work, we have to assume a large background of true shared beliefs with other people. Davidson refers to this as the Principle of Charity. Though it is a field left largely untouched and Davidson himself did not discuss it, Davidson recognizes that part of what underwrites the principle is that we share a vast evolutionary history with the other members of our species (Davidson 2001b, 202).

Before going any further, with regard to the term “belief,” the second aspect of anomalous monism is that it is strongly anti-representational. In other words, Davidson does not think the term “belief” refers to a representation in someone’s head. As Scott Davis has put this point, for Davidson there is nothing like “mentalese,” a so-called language of internal thought (G. S. Davis 2018a, 125). As with other pragmatists, for Davidson a belief and indeed all propositional attitudes are better understood as dispositions to act. That is, “anomalous monism makes sense of the claim that attitudes are dispositions to behave in certain ways” (Davidson 2001b, 72). In the case of a belief, this is a disposition to affirm or deny (that is, use the concepts of “little *t*” truth and “little *f* ” falsity) something—for example, that abortion is wrong or the world is flat. Such attitudes are not “in the thinkers—not in their minds, or before their minds.” Rather, having a belief is “just exemplifying a property” (75). Propositions, for Davidson, do not refer to entities but rather are abstractions we use to make sense of a person, for “the only *object* required for the existence of a belief is a believer” (74). Such mental events are as real as physical events, but they do not refer to entities. Thus, “having a belief is not like having a favorite cat, it is being in a state; and being in a state does not require that there be an entity called a state that one is in” (74). This is a crucial point to grasp going forward when we consider religion to involve propositional attitudes. Such attitudes should not be understood in representational terms but rather in pragmatic terms.

As a pragmatic concept, beliefs are tied to occasions and real patterns (Davidson 2001b, 82; Dennett 1991). They are ephemeral, coming and going in the context of communicative situations. They do not refer to representations in the head, but to external behaviors. Meaning is thus tied to the media by which it is uncovered. At the same time, as we will see shortly, every mental event (of which a belief is one type) must be identical with a physical event in the embodied brain. So this position does not call into question the fact that something must be going on in the embodied brain when we have such dispositions.

The third aspect of anomalous monism is freedom. Though it is often left out of accounts of anomalous monism, in the classic essay where he first described anomalous monism, Davidson begins and ends with freedom (Davidson 1980, 207, 225). In that essay, Davidson is "in sympathy with Kant when he says … '[philosophy] cannot give up the idea of nature any more than that of freedom'" (207; quoting Kant [1909, 75–76]). For Davidson, both he and Kant believe "freedom entails anomaly" (207). The challenge of that original essay for Davidson was to uphold an account of monism such that every mental event has an identical physical event, but at the same time to argue that the mental event is not nomologically reducible to the physical event. In other words, no law, physical or mental, could relate the mental and physical event.

Though potentially a paradox or contradiction, Davidson held that it was not, for we have to maintain this difference between the mental and material if we want to hold on to freedom, agency, and the content of mental states. On this account, freedom may need to be included in the list of transcendent primitives. It is the engine that drives anomalous monism in the sense that Davidson assumes any legitimate philosophical argument about the relation between the domains of the material and the mental must provide and uphold an account of human (and perhaps nonhuman) freedom. Over the course of this book I take up a few subjects I find relevant to religion that center on freedom entailed in anomaly, such as creativity, imagination, humor, surprise, and intimacy.

The relation between the mental and material leads into the fourth aspect of anomalous monism, the one most philosophers, including Davidson, focus on—namely, its implications for metaphysics. If you take these first three points about holistic behaviorism, coupled with the core primitives and freedom, some metaphysical implications arise. When we describe the world in purely physical terms, we can potentially describe it with laws. These laws would tell us everything we need to know about the world couched in a physical vocabulary. However, for Davidson this could never be the whole picture. For when we describe the world with a mental vocabulary, which is something we must do in order to understand other agents, we cannot even potentially describe it with laws. Mental vocabulary, which uses terms like “wish,” “desire,” “want,” or “hope”—terms wholly necessary if we want to understand the people around us as free selves (Davidson 2001b, 91)—is simply unfit to this task. If we want to retain the freedom behind mental descriptions of nature, we must understand those descriptions as anomalous, not reducible to anything like a physical law.

The twist in all of this is that Davidson still retains the argument that the mental and physical are identical. In other words, they both refer to the same one world. This is where the monism part of anomalous monism comes in. In more complex terminology, this has come to be called a token-identity theory. The tokens of the mental and the tokens of the physical can be understood as identical, while the types are not. As Kathrin Glüer puts this in her short introduction to Davidson, his claim is that there is “one neutral, monistic ontology of objects and events underlying these different classifications” (2011, 15). All mental events are thus also physical events at the same time.

For example, when someone wishes, there is a mental event (the wish) that is identical to some neural event (or pattern) in their brain. All mental events can be described using the physicalist vocabulary. In this sense, from an anomalous monist perspective, neuroscientists are doing great science, and the effort to understand the neural correlates of mental events should by all means continue. Such neural firings are indeed the same thing as the mental events that they instantiate.

Neuroscientists are doing great science, but not *all* the science, because the physical vocabulary by necessity leaves something crucial out. Davidson himself has been accused of not being very clear or indeed paradoxical about how mental and physical events can be the same but yet not completely reducible to one another. In analytic terminology, the debate has centered on whether and in what way mental events are supervenient on physical ones. For the purposes of this book, in order to glean something from Davidson and use it as inspiration for a theory of religion, I do not feel it necessary to go far into those debates (see Davidson 2005, 185–188; Kim 1998; Van Brakel 1999; McLaughlin 2006).

The fifth core aspect of Davidson’s philosophy, underpinning the previous four, is the focus on intersubjectivity as the core of meaning.

Intersubjectivity is what the word implies, the interrelation between subjects or agents. The domain of the mental vocabulary noted is that of the intersubjective relations we have with other agents. We use mental-state vocabulary in order to interact with other agents. Crucially, for Davidson, we must see such agents around us as acting freely. If we walked around viewing the people around us as robotic automatons, this would not leave much room for meaningful interaction with them. If you do not believe me, try it (briefly, please) and see how far you get.

Davidson’s view on intersubjectivity comes out most fully in his discussions of what he calls radical interpretation. He explains radical interpretation using his famous geometric analogy of triangulation. Since someone’s total behavior is never fully available, meaning making is always contextual and imminent in an active communicative triangle made up of at least two speakers and the “shared” environment around them (the world). Radical interpretation is derived from Quine’s notion of radical translation, which argues that every act of interpretation is also an act of translation that involves no unitary, absolutely correct translation of a given utterance. The correctness of interpretation will be determined by the pragmatic constraints of the conversation moving forward (Davidson 2001a, essay 9).[4]

Intersubjectivity not only grounds semantics, but it is also the source of objectivity (Davidson 2001b, 83). In other words, intersubjectivity is the basis for objective knowledge about the one world we all share. In this context, for Davidson, the role of the teacher cannot be overestimated. Whether one recognizes it or not, in order to learn to use a language, humans have to be shown how to do so. When we learn language, one vertex of the triangle is the “learner” and one vertex is the “teacher” (212). As Scott Davis has glossed this point, the move from infant communication to full-blown language must take place “under the tutelage of at least one other language-user, who interacts with the infant using her own idiolect” (G. S. Davis 2018b, 379). Such tutelage is how we learn to tie words to the world, but it is only done under the background of the radically intersubjective relation between teachers and students. Education, even in this minimal sense, is what gives content to thought.

Evolutionary Triangles

Any approach that aims to integrate the humanities and natural sciences in some way must come to terms with the evolution of human minds. As far as I can tell, Davidson never discussed the relation between his own philosophy and evolution to any great extent. He apparently did not think the theory of evolution was all that relevant to any of his arguments. Despite this, we can take it as an assumption that Davidson's philosophical approach accepts standard arguments in the physical sciences. As noted, Davidson's Principle of Charity is based on the idea that the massive set of true beliefs human beings share is part of the reason why radical interpretation is possible. When we radically interpret another creature, we have to assume they see and feel the world largely, but not completely, as we do. If they didn't, it is unlikely we would be able to communicate with them. Thus, a biological postulate of this theory should say that the further away a creature is from us on the tree of life, the more difficult it would be to interpret it. Mammals are perhaps most like us, and the most likely candidates for interspecies understanding. In other words, it is fair to say that the more DNA we share with another creature, the more likely we are to understand it.

Communication is possible not just because we are very similar to some other creatures, but also because we are different. That is, radical interpretation relies on the analogy of triangulation, which entails coordination between two creatures with different perspectives interacting with one another and a shared world.

As Jeff Malpas puts it, triangulation "is essentially underpinned by the principles of Euclidean geometry together with some basic trigonometry" (Malpas 2013, 259). If one knows the lengths of two of the sides of a triangle and one of the angles, she can calculate the length of the third side. In simple terms, triangulation allows us to determine relative locations in a triangle. With repeated measurement, we can come up with a relative map. Malpas thus sees triangulation as involving a spatial and temporal dimension and in fact points to "the co-implication of space with time" (259).

Triangulation is the key to understanding the relation between Davidson's philosophy of mind (anomalous monism) and his philosophy of language or interpretation. It was the way he explained how semantic content was possible even though mental states are anomalous.

Triangulation is how the content of rich communication is connected to the world at the same time that it is mixed in a web of coherence.

Malpas holds that triangulation is dynamic, processual, relational, and antifoundational. One reason Malpas thinks it has been so poorly understood by analytic philosophers is that they have failed to see it as an ontological thesis. We should not see triangulation as a "process that *operates upon* content," but rather it is a process that "*establishes* content" (Malpas 2013, 263, emphasis in original). As Marcia Cavell explains, "Meaning depends on successful interpretation rather than the other way around" (Cavell 2005, xv; see also Malpas 2013, 266).

As far as the ontology goes, it is a relational one, involving the interaction of creatures with "certain cognitive and behavioral capacities" with one another and the shared world. Since the interacting is external to individual minds, this is a form of externalism. Malpas argues that this *holistic-externalist relationalism* "is the real basis for the idea of anomalous monism—which can now be seen as essentially an expression of the commitment to triangulation, conjoined with certain other claims concerning the nature of law and cause, within the philosophy of mind" (Malpas 2013, 264).

In discussing triangulation in relation to the "emergence of thoughts," Davidson gets closest to touching on evolution. He is interested that when describing the evolution of human beings and also development in the life of an individual, there is a stage at which there is no thought followed by one where there is thought. He thinks that we do not have a satisfactory vocabulary for describing the transition between these stages in either case (Davidson 2001b, 127). Indeed, he thinks it might be impossible to come up with a bridging vocabulary between these stages (128). In chapter 3, I suggest that vocabulary from the field of enactive cognition gives us our best shot at coming up with this bridging vocabulary.

Despite this pessimism, he is willing to give some suggestions, and this is where triangulation comes in. Davidson thinks a triangular interaction can take place before anything like semantic content is possible, as in the case of nonhuman animals and small children. In this way, prelinguistic coordination between two creatures and the world, where reactions are correlated, can serve as a case of primitive triangulation. He provides the examples of schools of fish and certain monkeys (128).

This triangular situation is necessary for the emergence of thought, but it is not sufficient. In other words, more is needed for thought to emerge. For Davidson, what is needed is language. What Davidson means by “language” is probably not what you are thinking. Davidson means, first, the ability to use certain concepts, most importantly the concept of truth. Second, he thinks we need the concepts of names and predicates. Third, we need “truth-functional connectives” such as conjunction, negation, alternation, and the material conditional (“and,” “not,” “or,” “if … then”). The fourth is the biggest and perhaps most important leap for Davidson: we need quantification, “the concepts expressed by the words ‘some’ and ‘all,’ … [for] once we advance to this stage, we have arrived at languages that match, or begin to match, our own in complexity” (133).

Thus, any evolutionary story we tell about how rich semantic content, and indeed thoughts, emerge from a Davidsonian perspective has to account for these four steps. In this sense, to answer the question of how Davidson’s philosophy relates to evolution, the answer is surely to be found in the field of evolutionary linguistics. Here you have roughly two camps and a spectrum in between. Some think language is an adaptation; some think it is a by-product of sorts, providing a mechanistic but not adaptationist argument (Pinker and Jackendoff 2005; Palmarini 2008, 102).

This book is about religion, so it is beyond its scope to wade into such debates. I would simply note that the research most likely to explain the evolution of primitive triangulation focuses on the evolution of coordination and learning between agents (for an example, see Tomasello 1999) and the development of coordination and learning between agents (see Trevarthen and Aitken 2001). These approaches, like Davidson’s, understand that the unit of selection should be a behavioral, intersubjective interaction in time and space, not any particular node of the interaction. Saying this does not deny the importance of studying the behavioral, physiological, or cognitive makeup of the particular organisms that take part in the interaction. In neuroscience, the work of Terrence Deacon with regard to the evolution of language is perhaps the closest to a Davidsonian approach (Deacon 1997). The idea is basically that language evolved to infect us, not the other way around. In this way, the four concepts Davidson argues for could possibly have evolved largely external to human beings.

Once someone discovers them, these concepts must be learned. The closest evolutionary perspective I have found thus far concerning how such learning could take place comes from “cultural evolutionary psychology” (Heyes 2018, chapter 9). We can consider semantic language in Davidson’s sense to be a culturally evolved cognitive technology, or what Cecilia Heyes calls a “cognitive gadget” (Heyes 2018). Her approach has a similar perspective on the centrality of teaching and learning for human cognition. Like Davidson’s notion of triangulation, where the contingent social relation between teacher and learner (and environment) is the basis for semantic content to get off the ground, Heyes argues that “Small Ordinary” psychological attributes (temperament, attentional biases, and domain general processes of learning, memory, and cognitive control) that we mostly share with other animals (though they are “souped-up”), provide enough of a foundation for “Big Special” attributes (such as imitation, mentalizing, causal understanding, episodic memory, and self-conception) to emerge through cultural learning. As a product more of culture than genetic inheritance, the selective learning that makes “Big Special” cognitive gadgets possible is vulnerable and could be lost without constant intersubjective renewal (218).

Themes and Chapter Overview

Taking an anomalous monist approach allows us to look at religion in a new way, and in doing so, a few major themes emerge that I will discuss throughout this book. The first is that thoughts are real but not all thoughts are representational. Thoughts move in patterns; for example, sometimes they are dialectical. Certain types of thoughts are impossible to think without logic, but not all thoughts require logic or strict means-end rationality. Some thoughts are images, some are sounds. Some are half-formed, neither fully propositional nor nonpropositional. To have semantic, propositional thoughts—that is, to have semantic content—we need triangulation between at least two speakers and the world. In other words, semantic meaning is social, immanent, and contextual. We should also consider feelings as thoughts, or at least thoughts as components of our emotions. Thoughts always come in a medium. Often the medium is their use. Sometimes the medium is spoken language; sometimes it is written language. Many ancient religious texts fall into this latter category. They give us a certain type of imperfect record of thought.

With regard to ancient texts, they are the closest thing we have to recordings of ancient thoughts, and they are therefore quite important to understanding the history of thought and information. We should not forget that such texts are always interpreted in specific historical and political circumstances and that how we interpret them now also tells us a lot about ourselves.

In the second theme, I claim that thoughts are natural things. They are one class of the many fractal patterns we find in nature (see Czachesz 2012). In this sense, thoughts have a natural history; evolutionary psychology and psychology are continuous, or at least they should be. For this reason alone, scholars who study the history of thought, like scholars of religion, are vitally important. We are the ones who have been paying close attention to this aspect of reality. Minds are real, and we need both hard-science and humanities approaches to study them.

The third theme is that human beings are animals who, like all animals and most living things, have specific types of communication systems and media techniques. I explore how a holistic, systems-oriented approach to such communications might square with evolutionary and biosemiotic understandings of information. Human communication systems are perhaps special in that they appear to be susceptible to viral representations, though this too has parallels in other species. Some representations, such as the regular movement of heavenly bodies, are things we discover, not things we invent; the same may be true of language and mathematics. Buffering or decoupling of fuzzy representations appears to be the powerhouse of our particularly special form of cognition, and this is what makes both science and religion possible. I will explore the role that the phenomenon of surprise plays in isolating this particularly human capacity. In the process, I delve into the relation between fact and fiction, the lines between humans and other animals, the role that superhuman agency plays in our cognition, the potential to talk to aliens, and the evolution of religion, all within a framework of making explicit an alternative metaphysics—in contrast to implicit ones that are currently dominant in scientific approaches to religion.

I hope this brief summary provides enough background about Davidson's philosophy to keep you going.[5] I am not going to mount a full-scale defense of his holistic-externalist relationism, as Malpas called it, in these pages. That Davidson is considered one of the most important analytic philosophers is good enough for me. It is not my goal to convince a reductive materialist, for example, to adopt his stance; rather, if you are a reductive materialist, I want to tell you about some of the consequences if you do. In this regard, I hope you will keep an open mind.

Since Davidson's philosophy is holistic, each of these themes is interrelated with the others. Each of the chapters that follow illustrate the consequences of adopting one or more of the core aspects just mentioned, and all of them can be understood as exploring the idea of triangulation around the subject of religion.

In chapter 1, my goal is provide an orientation to the basic method that I take throughout the book and the broad terrain I cover. I argue that a Davidsonian approach to the semantics of religion is the best way to study religion, because it can do justice to both its material, biological, or technological side, and its mental or informational side, without reducing one to the other. When discussing religion, content is king, and there is no other way around it, so a semantic approach to religion should have central place in any theory of religion. The Davidsonian approach I recommend allows me to follow what I call a natural genealogy in order to outline the core features of religious language and to trace back both mental and material histories of religion in a nontheological way, while leaving room for alternative ontologies.

In order to make sense of the semantics of religion, we have to understand how it may or may not differ from other types of semantics. In chapter 2, I tackle the relation between two closely related semantics: fiction and religion. Previous approaches to fiction and religion exemplify the inexplicit metaphysics I am reacting against and most often fall victim to naïve representationalism and dualism. I thus explore the consequences of adopting an anti-representational, nondualistic, and intersubjective view of religious meaning, which I regard as a type of fiction. That is, religions involve triangulating with fictional agents. If we apply the motto about triangulation from Cavell, that "meaning depends on successful interpretation rather than the other way around," we see that attributing meaning always involves some fictionalizing, since it is a process of syncing an immanent theory about the projected patterns in another person's behavior with our own in the context of a shared environment.

I argue that much of the scholarly understanding concerning the relation between religion and fiction comes as a result of taking a potentially distorting, spectator view of language. Instead, looking at language from an anomalous monist perspective, we see that the perceived discrepancy between the two is contextual and must be taken case by case. I describe a few of the more influential theories about the relation between fictional and religious language and argue that from a semantic perspective there is not much reason to distinguish the two. Further, even from a social-psychological perspective there is not much more of a reason; human beings can believe practically anything, given the right developmental and cultural circumstances, and this is probably a good thing, accounting for our creativity and humor. Religion grows out of this, and it is foolish to think we can contain it without cutting off our creativity and humor at the same time. The narrative mental flexibility of the human animal necessarily rolls along with our unique biological and cognitive plasticity. We could not have one without the other.

Scientific approaches to religion up until now have tried to understand this plasticity from a top-down perspective, thinking they stand outside it. But the truth is that we do not and cannot, and thus a more immanent view on information is in order. The goal of the third chapter is to lay out a view of information that is conducive to this anomalous or “flat” approach. I am concerned with the jump between nonsemantic and semantic types of information, between the prelinguistic primitive triangle and the rich semantic triangle noted in the previous section. Another way to put this is that I am trying to account, historically and cosmologically, for the relation between the physical and the mental. It turns out that information and agency, though probably quite special in human animals, are continuous with the rest of nature, so we must make an effort to trace the notion of information back to the origins of life, and perhaps further.

The first three chapters present some of the approaches I am reacting against and argue for what I see as the theoretical way forward when we take seriously the propositional content of religion at the same time that we move away from representationalism. The last three chapters apply the theory to discrete cases: ancient texts, modern media, and intimacy. The fourth chapter is about the permutations of information in the process of creation. I focus on the important place of education in triangular meaning making and the role that texts play in that process, using an ancient “scientific” text known as *Sefer Yetzirah* (*Book of Creation*) as a jumping-off point to make further arguments about natural information. This text (and others like it) considers language and instruction (what ancient Hebrew writers called “torah”) to be embedded in the fabric of the universe. I argue that this is not as strange an idea as it sounds from the perspective of modern cosmology. I provide some examples from diverse fields such as education, mathematics, comedy, and psychedelia to elucidate the anomalous monist perspective on creativity as something beyond human beings. This perspective requires us to reorient ourselves away from the anthropocentric bias that also distorts our picture of religion.

Stars are perhaps the most ancient form of natural information, of human consciousness discovering information embedded in the universe. In the fifth chapter, I argue that the more recent technologies that have allowed us to control light—from writing (black fire on white fire[6]) to LEDs—thereby controlling what people see and ultimately know, lie at the heart of that most modern form of “religion”: the cult of celebrity. I argue that children are especially susceptible to this type of information because their particular distinctions between fantasy and reality are not inborn but take time to develop. Both television, in the form of advertising, and religion, in the form of myth-making, plug into this aspect of childhood development; they both teach children about what Maurice Bloch calls the “transcendental social.” But it is wrong to see adult and child imaginaries as starkly different, for adults also blur the lines between fiction and reality. Our obsession with the luminous ones goes very far back in human history, and I argue further that we can understand the cult of celebrity by tracing the trajectory of that obsession through liminal figures who blur lines between humans, gods, and animals. I thus explore the connection between meaning and media, examining, in effect, what happens when we triangulate with agents on our screens. In the process, I argue that the semantics of religion is coupled to its media technologies.

Celebrities, like gods, are intimate strangers, paradoxical figures we are intersubjectively close to and far away from at the same time. We can feel close to superhuman agents, even love them. In the sixth and final chapter, I explore this paradox further by taking up the topic of intimacy. Intimacy is central to religion because it concerns the quality of intersubjective interactions and requires some owning of individual subjectivity. Intimacy involves subjective feelings and emotions; from an anomalous monist perspective, however, a more fundamental ground for experience is intersubjectivity. The sixth chapter thus takes up the problem of accounting for subjectivity in the context of prioritized intersubjectivity. Intimate relationships are filled with fictions, for not all triangles are equal, especially when we triangulate with those we love.

Notes

All biblical quotations are taken from *Biblia Hebraica Stuttgartensia* (Alt 1997). Translations are my own.

1. In biblical cosmology, a solid structure (רָקִיעַ, *rāqiaʿ*) of some kind supported the heavens, referred to classically as a “firmament” in the King James Version of the Bible. Waters held above it would occasionally fall down as rain (Gen. 1; Ezek. 1:22–25; see also Job 22:14 and Amos 9:6, which may refer to the same idea).

2. A few others have outlined a different version of the fourth dogma (e.g., M. L. Anderson and Chemero 2013; M. L. Anderson 2006).

3. Ironically, as Riesebrodt points out, abandoning concepts simply because they are constructed naïvely assumes “a direct correspondence between reality and concepts” in general (7) and thus may paradoxically import a bankrupt correspondence theory through the back door.

4. I have discussed radical interpretation at length elsewhere (G. Levy 2012, 2014), as have others (Malpas 1992; Davidson 1994a; Fodor and Lepore 1994; Engler and Gardiner 2015; Gardiner 2016; Heal 2017).

[5]. For a recent summary of Davidson, see Glüer (2011).

[6]. The idea that some forms of writing are a kind of fire comes from a famous tradition in Talmud Yerushalmi attributed to R. Shimon b. Lakish by R. Pinchas (Šeqalim 6:1, 25B). Quoting the blessing in Deuteronomy 33 that Moses recites before his death (33:2), which depicts Yahweh holding some kind of fire by his right (hand), the tradition says the Torah that the Holy One gave to Moses was made of white fire inscribed by black fire: “It was fire, mixed with fire, hewn from fire and given by fire” (see Verman 2007, 97).

1 Nondualistic Semantics

In the introduction, I described what I see as the urgent intellectual problem of the growing gulf between the humanities and the natural sciences. In order to bring the two closer together, I suggest scholars make explicit the ontological assumptions that lie behind them, because I think this is largely where the disconnect arises. Once made explicit, their assumptions can be discussed and debated. I argue in support of dual-aspect versions of monism, specifically that proposed by Davidson called anomalous monism. His version of monism says that the universe is metaphysically one but that because of the nature of language we cannot help but talk about it in two radically distinct ways: in terms of mental things and in terms of physical things. We cannot a priori figure out how these two vocabularies could be reconciled, and there will be necessary limits on how far that reconciliation can go.

In this chapter, I orient the reader in this perspective while turning toward the topic of religion. Taking a holistic approach to meaning that at the same time situates religion in an evolutionary perspective opens up an inherent internal contradiction. The hard question is this: How can something like holistic meaning gradually emerge when it seemingly must emerge all at once? You either have thoughts or you do not. With holism, one has to jump in somewhere. In this chapter, I jump into this problem by focusing on issues at the center of Davidson's philosophy—namely, the nature of language as intersubjective translation and the relation between thought and semantics. In sum, two types of information have emerged, one captured by the term "holistic semantics," the other by the term "natural information." Davidson did not account for the relation between them, but I attempt to do so. The holistic level of meaning and the biological level of information are related to one another dynamically and nonlinearly; there are not strict laws that relate them, so the discussion of how they relate requires some shifting back and forth between the two perspectives. The structure of the present chapter, and indeed the book as whole, follows from this premise.

In order to set the stage, in the first part of this chapter I describe the central elements of Davidson's notion of semantics, which he ties to concepts of translation and the irreducibility of thought. Thoughts must come from somewhere; for Davidson they are possible because of the unique generative semantic-syntax humans possess. In this syntax, truth and falsity are primitive operators. Truth, in contrast to falsity, is a primitive concept that we preserve across linguistic interactions. Interpretation could not get off the ground without this preservation. The reason we have religion then boils down to the fact that we have thoughts.

Truth and falsity ride along together; we could not have one without the other. Thinking about meaning-making in this way opens up the problem of accounting for why human beings hold false beliefs. In other words, in order to take religion more seriously, we have to make sense of falsity and the role it plays in thought.

However, in order to move any further in the direction of an etiology of thought—for example, about the origins of our generative semantic-syntax—we have to jump out of the holistic perspective of meaning to that of the life sciences and a genealogy of natural information. Since we can never in fact jump completely out of the holistic perspective, this exercise will be paradoxical and imaginative. In the second and third part of the chapter, I address the methodological and metaphysical implications of this anomalous monist framework, which I hope could be acceptable to both humanists and natural scientists, as a basic background for the later chapters.

Semantics concerns the way in which languages are meaningful. Religious language is not a special kind of language, so the semantics of religious language is going to be the same as any other type of semantics. However, from the perspective in which I approach this issue, there is reason to doubt that there is such a thing as language in the sense we usually mean it (Davidson 1986b, 446). This is because for Davidson having language does not mean speaking any number of the world's languages; rather, it centers on the concept of translatability. A language is something that is potentially translatable, a field in which the semantic primitive of truth can possibly be preserved across interactions. In other words, without translatability there is no language (Glock 2007).

In the long tradition of comparing religion and language, we can also say that there is no such thing as *religion* in the sense we usually mean it. Joseph Bulbulia, who takes a holistic approach to religion while at the same time integrating evolutionary arguments, has asked this very question: "Are there any religions?" He means to suggest, with analogy to language evolution, that there are only surface differences between religions while deep down the underlying cognition is the same (Bulbulia 2005).

From the perspective of Davidsonian semantics, we can ask a similar question. We get a similar answer, but for different reasons. Davidson relates a version of his very particular account of language in the remarkable essay "A Nice Derangement of Epitaphs," where he brings together his semantic holism with a pragmatic theory about learning language. There is no such thing as distinct languages because any human being, with enough time, can come to communicate with someone who speaks a "different language."[1] In other words, part of what it means to be a speaker of language is that one can potentially learn any language.

Davidson draws a line in the sand concerning language next to this term "human being." For Davidson, this is the only creature we know of that has semantics. Having semantics and having thoughts come along together for Davidson. Perhaps it would be better to speak of these as "human" thoughts, but then again, if another creature were able to communicate its thoughts to us, we would have to describe them also as "human" thoughts. In other words, other creatures may have thoughts, but we would not know it unless they were "human" thoughts.

Davidson speculates very little on the origin of thoughts, either in ontogenetic (think babies) or phylogenetic (think the evolution of our species) terms. But for me, and a great many other philosophers and scientists, this is the most central question. In other words, how does our species go from a creature without human thoughts to a creature with human thoughts? Is there a moment, as Noam Chomsky thinks, when the whole universe becomes meaningful all at once (Chomsky 2005, 11–12; G. Levy 2014, 192n11)? To complicate matters, from a Davidsonian perspective, since thought is intersubjective at its core, you would need at least two creatures making this jump together.

Understanding the origin of something does not necessarily tell us why we have it now, but it is nevertheless interesting from a purely historical perspective. The question of origins is a deep, difficult one, since we cannot go back in time and observe how exactly this happened. Then again, this event seems to happen in a more mundane way every second. Though difficult to observe, somewhere in the world right now a human being is having her first thought. At some point in the process of growing from a baby to an adult, we can say the creature has intentions, has an intentional mind (Dennett 1989). The point is that from the ontogenetic or developmental perspective, we should be able to observe this transition (if that is what it is) happening. But do we? When I think of my children, even though this is a question I have been obsessed with their entire lives, there was never one moment when I noticed the occurrence of their first thought.

Our memories also fail us in this respect. Perhaps if we could remember what it was like to be a baby, we would understand more about this process. It is likely that this amnesia and our lack of intentional consciousness at the time are related (R. F. Thompson and Madigan 2013, 63–65; Madsen and Kim 2016). This is not to say that creatures without it, like *Homo erectus*, cats, or babies are less valuable in any way. Maybe they know much more about what is going on than we do. The relations between thoughts, intentions, and consciousness are complicated, and I will say much more about them in the pages that follow (Dennett 1993; Noë 2009; O'Regan 2011; Graziano 2013). It would appear that whatever is happening, we are not talking about a singular moment but a gradual process of gaining (more?) consciousness. It seems consciousness is something there can be more of or less of. The idea that consciousness has the potential to gradually mature is of course a very old "religious" idea (Coan 1989; Just 2013; DelMonte and Halpin 2019).[2]

Perhaps the same can be said of the phylogenetic story of thought and semantic emergence—that this was not sudden but a gradual process, and that the process continues. Davidson, like Chomsky, thinks the acquisition of grammar was a crucial piece of the puzzle. But Davidson adds to this a generative semantic grammar. There are basic concepts, most especially the primitive concepts of truth and falsity, without which thought could not get off the ground (Lepore and Ludwig 2007). These are semantic, intersubjective concepts that also allow language to connect with basic observations about the world (Davidson 2001b). And here is where the anomalous part of Davidson's anomalous monism comes in. Since neither the mental nor the material is ultimately what things are made of, one must leave open the possibility that concepts are just as real as material things. Concepts have a life of their own. Concepts, even, can develop, change, and evolve.

To summarize, for Davidson the primitive concepts of truth and falsity are the core of thought as we know it. These concepts are primitive for Davidson in the sense that they are so basic that he thought it was a "folly" to define them. They are so basic that any attempt to define them already implies them, leading to circularity (Davidson 2005, essay 2). Christopher Norris has unpacked this idea most correctly when he says, "For Davidson, truth is where we start from—that is to say, from the attitude of holding-true as a necessary feature of all conceivable languages—and it is on this basis that we can then proceed to make adjustments (whether localized or far-reaching) to our sense of what would count as an adequate truth-preserving interpretation" (Norris 2000, 106). In other words, we want to preserve truth for ourselves as much as possible. "Little *t*" truth (and "little *f* " falsity) are the modest devices we use to make minor adjustments in the course of our intersubjective dialogue with others.

We are able to preserve truth within and across conversations because speakers of language have a lot in common; this idea is the crux of what Davidson called the Principle of Charity (Pagin 2013; Davidson 2001a). Theorists have thus tended to "'get the matter backward' … by viewing truth as internal (or relative) to some particular language, discourse, paradigm or conceptual scheme" (Norris 2000, 107). In other words, truth and falsity are not internal to any particular language; rather, the space of thought generated by them is analogous to the invariance in Einsteinian space-time. That is, like space-time, these concepts are not internal to the field but create the field in which meaning is possible (see chapter 4).

Once we get out of this view of truth as internal to particular languages, we realize that "syntax is … more 'sociable' than semantics … since it offers more scope for locating those various structures (of assertion, negation, entailment, cross-reference, anaphora, and so forth)" (Norris 2000, 107). In other words, learning language is going to start with the most universally primitive concepts, whether of a syntactical or semantic nature. In this sense Davidson discovered a syntax of semantics, with the primitive concepts of truth and falsity being the most essential to thought.

For Davidsonian holists, once someone is able to use these primitive syntactical-semantic concepts, it is hard to resist the conclusion that the whole universe suddenly becomes meaningful all at once. Whether one thinks the concepts of truth and falsity were discovered or thinks they were built up gradually, I argue that as soon as human beings have truth and falsity, we have religion. I think falsity is more important in this story than truth. The very first time someone disagreed with someone else, this is when we had religion. The first time someone called "Bullshit," religion was born.

This moment is also when science was born, as Karl Popper famously argued (Popper 1972). If we look at the relation between ethnoscience and religion, where culturally embedded scientific know-how (for example, how to build a good spear or where to find water) is usually integrated with religious beliefs and practices, we can say that initially the difference between science and religion was probably not that great. With modern differentiation the two have parted ways to some extent, especially with the invention and branding of the scientific method (Riskin 2020). Despite its being a brand, the scientific method has been a powerful tool such that science is able to identify bullshit at a much faster pace than religion. In addition, science is supposed to have mechanisms for identifying its own bullshit. Religious systems sometimes institute such self-corrective measures and criticism, but this usually leads to schism. Though science has more communally instituted corrective measures built in, it still has a large degree of fiction due to the fact that, firstly, narratives still play an important role (Mlodinow 2016) and, secondly, science is social and thus becomes mixed up in all sorts of human vices (Ritchie 2020).

The connection between thought, science, and religion is more complicated than this however, because once someone had thoughts, someone started thinking about thoughts. Having thoughts about thoughts can make it difficult to think about religion. The basic point for us moving forward is that once we had "language" in this Davidsonian sense, religion came along for the ride. That is, when truth can be preserved across interactions, we can say that there is a space of thought and meaning where religions make sense.

To make the implications of this argument more specific, I think we have to differentiate between two types of religious systems. For Davidson, a language-using creature will share a massive set of true beliefs with other language-using creatures with whom she interacts. If we want to call these massively shared beliefs religion, they are religion in the sense described by anthropologist Maurice Bloch as intuitive (2002). Religious wisdom traditions, such as those found in the biblical book of Proverbs, often express these patently true intuitions, for example, well-known sayings such as "Pride comes before the fall" (Proverbs 18:12). Let us call this form of religion, religion1. Religion1 emerged at the same time as thought. Then at some point in history, human beings began to communally institute, collectively proscribe, certain attitudes and practices about nonhuman persons (or superhuman agents). Some attitudes and practices were OK and true, some were bullshit and false. Let us call this form of religion, religion2. Religion2 took longer to develop, emerging when human beings began to systematically differentiate certain attitudes and practices together.

Irrationality?

I have said a lot about the role of truth in meaning-making, but what about the role of falsity? How do we account for that? Evolutionarily and developmentally speaking, once we have bullshitting, we have the potential for religion. But this opens up a very basic question: From the perspective of holistic semantics, why do we have bullshit in the first place? Why is some language in friction with truth?

Nancy Frankenberry (2014) addresses this friction with regard to the truth or rationality of religious beliefs. After reiterating the point that religion has to be understood in the context of massive rationality (the Principle of Charity), she asks, "Why and how is it that religious folk whose *overall* rationality is not in question hold false beliefs?" (202). She says this is an urgent and hard question but knows of no good answer on the part of theorists because they all "plunge straight into the functionalist fallacy" (202). She proposes an alternative nonfunctionalist framework for answering this question, with reference to a series of later works by Davidson on the subject of irrationality.

In this period of Davidson's life (probably influenced by conversations with his wife Marcia Cavell, a philosopher of psychoanalysis), he delved into issues such as wishful thinking and self-deception—in other words, “problems of irrationality” that seem to involve a “partitioning of the mind” (204). From this perspective, Frankenberry sees religion as a case among many others of beliefs being caused by desires. She is most open to the idea of religion thus as a form of wish fulfillment, for “wishful thinking involves a desire that something be true, causing the belief that it *is* true, but in no case can the desire be the *reason* for believing something to be true” (204). She argues that in its extreme cases wish fulfillment can lead to self-deception.[3] Frankenberry’s Davidsonian approach to the persistence of false beliefs is a guiding one for this book.

Religion is a case of an area of thought and action that quintessentially concerns the line between fact and fiction, between truth and falsity. But what are the methodological consequences of taking an anomalous monist approach to religion? As noted in the introduction, at this moment in the study of religion, two dominant methodological paradigms are operative. One looks at discourse about religion to try to understand why we call some things religion and other things something else. Usually the reasons have to do with the power of institutions. The term “religion” is able to serve diverse powers because it is a floating signifier. It is not a term that is easy to define. The ambiguity around the term is also where the other dominant methodological paradigm comes in. Cognitive approaches try to naturalize religion as much as they can. However, a public secret is that the term “religion” is not in fact a natural term; it “is not a name for an unproblematic, given object, which one could simply point to” (Riesebrodt 2010, 19). The concept of religion does not cut physical nature off at the joints, so at best scholars break religion down into component pieces or building blocks that can themselves be naturalized (Taves 2009). At worst, scholars uncritically use the term “religion” without understanding its embeddedness in speech acts and its institutional historicity (see, for example, Swan and Halberstadt [2019]).

In uncritical uses of the term, scientists and scholars often import Eurocentric or Abrahamic-centric ideas about what religion is, and with them what scholar of Egyptian religion Jan Assmann calls the “counter-religious” impulses entailed in these traditions. Abrahamic religions have been particularly keen on making distinctions about religion. For Assman, “counter-religion” was a phenomenon that had a spark in ancient Egyptian efforts to monopolize the cult of gods by focusing on one aspect of the sun god in particular (the solar disk) but that really got going with what he terms the "Mosaic distinction" (Assmann 2010; see also Markschies 2010). For counter-religion, some religions are false, some are true (usually mine is true and yours is false). European sciences have inherited some of the vocabulary behind this distinction while being unaware of the very ancient theological and metaphysical baggage it carries.

This book is partly a genealogy of this process, an enunciating of the intellectual conditions of possibility for making such a distinction between true and false religion. I mean "genealogy" in the Foucaultian sense. However, I modify it in a more Quinean analytic mode, inspired by work on historical ontology (Quine 1980; Hacking 2000, 2004). From the perspective of this book, Foucault's genealogical work, like that of most humanists, focuses on too small of a historical window. This is the case even in his later works that consider the history of sexuality over the last 2,000 years (Foucault 1990a, 1992, 1998). The genealogy presented in what follows spans the entire history of life on this planet and beyond. This is certainly an ambitious undertaking, combining the deep history approach (Smail 2007; Bellah 2011; Gamble 2013; Spier 2015) with the genealogical approach (Foucault 1990b, 1994; Friedland 2002; McCutcheon 2003; F. Curtis 2016; Modern 2021).

So this book is a deep genealogy on the subject of religion. Just as Foucault's method centered on the study of texts that determine the contours and gravities of a particular episteme or historical field of knowledge, in the present study I expand the concept of "text" to include any materiality with information. Living things are literally texts. For example, scientists have artificially created a living organism, an *E. coli* bacterium, its genome composed entirely of human-made DNA; in doing so, "the researchers treated E. coli DNA as if it were a gigantic text file, performing a search-and-replace function at over 18,000 spots" (Zimmer 2019; see Fredens et al. 2019). In this sense, discourse is not confined to human animals but provides a context for natural genealogies going back to the origins of life. Human animals have a special form of discourse—namely, "language"—but the full-blown recursive form of language that allows layering of information did not evolve until relatively recently in our history (Corballis 2014).

Though many scientists argue that "language" must have evolved around the time hominids began making tools, burying the dead, and creating certain forms of art, the only concrete evidence comes with records of written language. Thus, while it is reasonable to think that language evolved simultaneously with those other skills, there is no evidence for it. Either way, language as we know it evolved rather late in terms of the history of our species. Once language evolved, it makes sense to start speaking of us as having thoughts. But this ability did not arise magically; there were evolutionary precursors. Though there is debate about whether language evolved "for the purpose" of communication or whether communication with language is a by-product of other adaptations (Fitch, Hauser, and Chomsky 2005), these precursors must have been something like the communication systems we see in other animals. Perhaps to avoid the controversy, we could say that language's precursors must have been something like coordination systems we see in other animals, with communication being part of that system (Searcy and Nowicki 2005; Cheney and Seyfarth 2008; Kappeler and Silk 2010; Fitch 2010; Schaefer and Ruxton 2011; Stegmann 2013).

Once humans had thoughts, it makes sense for us to start thinking in terms of Davidson's holism. Thoughts are mental, and any particular token of thought is identical to some particular token of a physical brain state (token-identity); however, thoughts have a conceptual logic of their own that cannot be completely reduced to that material. Humans can act on the basis of thoughts (reasons). The thoughts can cause us to do something physical (reasons can be causes). The reverse is not true. Causes cannot be reasons (Davidson 1980).

However, it might be the case that acting for reasons, rather than rationalizing our behaviors after we have already behaved in a certain way, is exceedingly rare (Ariely 2008, 2016). In other words, we may in fact rarely act on the basis of thoughtful reasons. At least with thoughts, we have the potential to do so. My point in bringing up this question about the relation between reasons and actions is to say that trying to understand discourse in terms of the mental environment that provides the context for thoughts and behaviors is an extremely valuable enterprise—for example, trying to understand how the word "religion" is used in various discursive contexts (Von Stuckrad 2003). This is part of what humanists do. I do not think anyone can study religion—even if doing so from a hard science, biological perspective—without some familiarity with this approach. On the one hand, without this familiarity, we are often left with extremely naïve scientific efforts about religion, whereby scholars think the concept has a simple and obvious referent but do not see their own positionality in creating that reference (for a recent example, again see Swan and Halberstadt [2019]).

On the other hand, is it not reasonable in this era of climate change and environmental thinking to understand that human beings are but one species on the biosphere of earth? Just as it is myopic to ignore the discursive context of thought, it is also myopic to ignore the biological context. Humanists, I am afraid, are perhaps the worst dualist offenders around, with uncritical acceptance of the anthropocentric idea that human animals are somehow magically special, perhaps because we have language.

Just because thoughts and ideas are constructed does not make them unreal. As students of real thoughts and ideas, humanists need special methods that separate their own studies from other sciences. Unlike consilience theorists (Slingerland and Collard 2011), as noted, it is fair to say that such aspects of human life are conceptually irreducible, but ultimately we are all studying the same reality, so the radical wall of separation needs to come down and be replaced with a friendly border with well-thought-out transit customs. This is the central puzzle concerning how we get conversation going across our universities with minimal offense. I think the conversation can start by recognizing dualism as conceptual rather than metaphysical. We are all studying the same thing metaphysically speaking, but we will need different conceptual methods to approach it. Since neither the hard sciences nor the humanities has a privileged position in terms of describing reality, this opens the possibility for alternative metaphysics. When we consider alternative metaphysics, we must at the same time recognize they could involve alternative epistemologies, or theories of knowledge and what counts as knowledge, as well. The two (metaphysics and epistemology) probably ride together, and it is best to make disagreements about them explicit. Let’s put the cards on the table.

Thomas Nagel’s (2012) presentation of the problem of the relation between mind and cosmos is an example of an explicit, clear alternative to the dominant, implicit metaphysical assumptions currently in use, and I take it as inspiration throughout this book. He describes his position as a form of neutral monism, meaning he thinks the dualism between mental and physical or mind and body ultimately reduces to something more fundamental, something neither mental nor physical, and hence "neutral." Nagel thinks that science has yet to figure out a way to talk about this, but once it does, we will have a solution to the mind-body problem and an explanation of consciousness. Nagel considers his book a critique of "the reductionist neo-Darwinian account of the origin and evolution of life" (6). But since the lines between mind and cosmos and life and nonlife to this point are at best blurry, I see him as actually providing good reasons to apply evolutionary theory *even more* expansively, basically to any self-organizing system. There will be limits to such application, most importantly in the domain of the mental.

Where his position differs with Davidson's anomalous monism is in the idea of immanent semantics: Davidson thinks dualism is primarily conceptual rather than metaphysical, arising in the pragmatic context of second-person address where we wish to preserve freedom. We have dualism because in that context we cannot possibly describe mental events and physical events with the same vocabulary. When we describe the world in physical terms, we by necessity describe it as mindless. It is not possible to describe mental events with such a vocabulary without losing the point. Ultimately, the two vocabularies are descriptions of the same thing; hence, we can say anomalous monism is a type of neutral monism. However, for Davidson conceptual dualism is mostly a fallout of language, and we are stuck with it; he eschews a move that seduces us into thinking we can stand outside it.

For my purposes in this book, a detailed comparison of Davidson and Nagel would not be all that relevant. Where the comparison is relevant, I will point it out. Generally, I think most pragmatic nondualistic or dual-aspect monist approaches will overlap quite a bit in the terrain I explore. This includes those from continental philosophy inspired by Husserl's nonreductive phenomenological approach to psychological phenomena, in addition to some "religious" intellectual traditions, such as nondualist Buddhist or Vedic philosophy (Radhakrishnan 2009; Perrett 2017).

While humanists are afraid to be monists for fear of crass physicalism, both Davidson and Nagel are reacting to a hidden dualism at the heart of natural science (Goff 2019). Natural scientists think of themselves as offering a unified theory, and hence as monists. However, their unified theory usually involves an understanding of scientific facts as entirely about the physical, material world (Cho and Squier 2008). So they implicitly accept that there is a dualism between mental and material things but focus entirely on the latter, regarding the former as epiphenomena that will be taken care of by a theory down the road. I agree with Nagel that taking this approach could never actually get things right. If we are going to be monists, or even nondualists, we have to start that way from the beginning of our theorizing and explanation building. Admittedly, this may look quite strange at first, or as Nagel puts it, "extravagant and costly" as a philosophical position, but I think he is right that it is worth the cost (Nagel 2012, 43).

I can see how someone might wonder why the metaphysical question at the center of this book is so important. Should we care? What would change if more people thought in anomalous monist terms, and would this even be possible? My question has always been why people care so little about the assumptions underlying the sciences. These assumptions do matter, and anomalous monism can help.

We know at least one consequence of strong metaphysical dualism is the split between the humanities and natural sciences. Since, at least from a Davidsonian perspective, this split is justified on epistemological grounds, the problem is not that there is a conceptual split, but rather that the split is built into the fabric of modern universities, which are usually administered on the basis of its most physicalist version. Ideas are not taken very seriously in the natural sciences, while the physical world of, for example, biology and physics is not taken very seriously in the humanities. In other words, hidden in the materialism of the modern university is the old essentialist dualism. The natural and hard sciences work well with the physical, but if Davidson is right, there is good reason to think that the mental can never be described in terms similar to physical laws. In this sense, it is our irreducible mental vocabulary that makes human life anomalous. The humanities are much better than other disciplines at studying the anomalous precisely because humanist disciplines resist a push to reductive laws. Anomalous monism can give us some tools to investigate mental and material systems without reducing one necessarily to the other.

Studying the mental is an old tradition that is often part of religious or philosophical training. Philosophical dialogues engage it. I have argued that Talmudic conversation does so as well, perhaps better than rationalist philosophy, because it does not assume that the subject matter of conversation is lawlike (G. Levy 2010). It does not assume the universe is reasonable, at least not in the sense that we could understand it. Some openness to alternative traditions is therefore in order.

In many ways these fields, the natural sciences and humanities, are talking past one another. But where both most obviously overlap is on the topic of the nature of information and language. What would a book about religion look like that takes a staunchly consistent anomalous monist, nonrepresentational approach? On some level it would look like some other nondualistic, even theological approaches to religion (E. F. Kelly, Crabtree, and Marshall 2015). Nondualistic approaches, including some other forms of dual-aspect monism, tend to lean theological when they try to account for the mental, or other nonphysical aspects of reality, in metaphysical terms. I am agnostic when it comes to these types of accounts. For now, I take Davidson's approach that ultimately reality is not mental or material but that we inevitably split these up for epistemic reasons that are tied closely to language.

So from this strict anomalous monist perspective, when religion started depends on its definition. I lightly modify Hans Penner's analytic definition of religion, defining religions as communally instituted systems of propositional attitudes and practices related to superhuman agents (Penner 2014, 422). This definition is not perfect. For example, one might think religion should be defined more broadly than the relation to superhuman agents. I think such a definition could be perfectly fine, depending on the work it does (J. Z. Smith 1982, xi). For my purposes, laying out this definition tells you what slice of reality I look at when I imagine religion. I think it does a good job isolating most of the systems people think of when they think of religion. Even Buddhism, as Penner shows over and over again, has a superhuman agent—namely, the Buddha himself (Penner 2014, 423).

My definition of religion thus involves agency and the difference between human and superhuman agency at its core. When holistic semantics appears on the scene, in the context of the human ability to coordinate and be communal—in other words, with human intersubjectivity—agency radically changes, but it still must be continuous with other forms of animal agency. The next two chapters explore this point by focusing on superhuman agents and comparing them with fictional agents. I argue that from the Davidsonian perspective I follow, agency must be traced back much further than we usually assume, to the beginning of life, and possibly beyond.

Notes

1. For more comments on this essay, see G. Levy (2012).

2. I think we need to be very careful about attributing maturation in consciousness. On the one hand, it is good for us to think that our species can become more mature over time (Pinker 2018). On the other hand, there is a danger in thinking we are more mature in terms of consciousness than other creatures, which may betray our own anthropocentric and perhaps Eurocentric biases.

3. Frankenberry differentiates a desire that could cause a belief from a need. The latter runs the risk of importing functionalist language. Since needs "differ from both beliefs and desires in not being governed by any fundamental norms for the way we variously attribute them in our processes of understanding," they provide no explanatory value (2014, 206). Rather, needs are what must be explained.

2 Fiction's Frictions

> No *particular* points are essential; different direct connections lead speakers by different routes into the same language.
>
> —Donald Davidson, "Locating Literary Language"

In the previous chapter, I discussed some metaphysical and methodological implications for studying religion from a Davidsonian perspective and suggested that the concept of falsity was central to this account. Though the semantic primitives of truth and falsity provide the conceptual anchors for semantics and meaning, I argued they can be traced back further in terms of natural information. I will return to this point in chapter 3.

In this chapter, I continue to move back and forth between the levels of meaning and biology in an exploration of the difference between falsity and fiction. This discussion is important for understanding religion because a central chunk of content in religious language concerns superhuman agents, a type of agent that has been compared to, and I think wrongly distinguished from, fictional agents. I begin the chapter by returning to the metaphysical questions raised at the end of chapter 1. As I argue broadly in the book, making our metaphysics explicit will help us bring the humanities and natural sciences into a productive conversation. In this case, the question about the relation between mind and body in particular has stark consequences for our understanding of fictional agents, as will questions about the reality status of representations and the role of intentions. After this, I move on to discuss a few of the more relevant theories about superhuman agents and their relation to fiction. I argue that from a Davidsonian perspective, the semantics around these agents is fuzzy. There is not a sharp line between fictional agents and superhuman agents. I argue further that the account of semantics that is closest to Davidson in the mind and life sciences is that of enactive cognition. This allied theory helps us move further away from spectator representationalism about fictional agents, which I think only stands in the way of making sense of their fuzziness, at the same time that it brings a biological account closer to holistic semantics.

Religious Language

What is the nature of religious language? Natural-science approaches have tended to explain (away?) the content of religious language in a number of distinct ways. For example, one of the more popular theoretical trends argues that religions have a special type of information that is especially memorable and tends to survive (Willard, Henrich, and Norenzayan 2016; Purzycki and Willard 2016). Some of these approaches argue that religious information has a special survival function not just for the information but also for the groups that have it (Bulbulia and Sosis 2011). Having certain information makes our species, or groups within our species, at particular times and places more likely to survive. In most cases the content of the information is seen as less important than the function. In other words, for most if not all functionalist approaches, it is not really the informational content of religion but rather the behaviors they supposedly encourage that promotes the function.

Even discounting critiques of functionalism that argue such an approach is hopelessly flawed when it comes to religion, Davidsonian theorists of religion argue that it is a mistake to explain religion without placing its semantic content at the center, because without an explanation of the content we could never be sure we are talking about religion (Penner 1989). If this sounds circular, that is because it is. One of the core presuppositions of the approach is that a constitutive feature of religion concerns people's beliefs and practices about superhuman agents (variously defined). The only way to ascertain that beliefs are about something in particular is to engage the beliefs semantically, by "talking" to those people who hold them. Put simply, religion is about meaning. By talking to people, one finds they are often interested in nonhuman or superhuman agents—such as gods, demons, ghosts, spirits, and more—who go by proper names like God, Krishna, Buddha, Jesus, or, more mundanely, (the ghost of) Aunt Betty. Religious language is made up of stories and conversations about such agents. There is nothing special about such language beyond what the talk is about, so no special theory of language, cognitive or otherwise, is needed to account for it.

The gap between meaning and function is exemplary of bigger issues in attempts to explain phenomena from the social sciences and humanities in cognitive or evolutionary terms. We have laudable efforts by scholars like Daniel Lord Smail to bring history into this conversation (Smail 2007), scholars in religious studies pushing consilience (Slingerland and Collard 2011), scholars in film and literature doing something similar (Boyd, Carroll, and Gottschall 2010; J. Carroll et al. 2012; Nannicelli and Taberham 2014; J. Carroll 2018). But often in these examples neither humanist nor scientist is happy. Harder-nosed scientists are focused on operationalizing terms, looking for causes and correlations that can be tested. Or they are looking at the grand scale of evolutionary history to make very broad claims. These claims are often painful to the humanist or social scientist studying the gritty details, microhistories, and local contexts where, indeed, the contents of the systems they study are much more relevant than making the wider claims of their colleagues (F. Curtis 2010; Modern 2012).

Between these two sides we find something of the old divide between the postmodernist idea that there is nothing outside the text, nothing outside discourse, and the scientistic idea that everything can eventually be explained by science—that is, that there is nothing outside of science. If something cannot be operationalized and tested in a laboratory or in laboratory-like conditions, then it is not real.

There is a logic to dividing the natural and human sciences. The logic is that the “natural” world is mindless, whereas understanding or explaining anything human involves minds. In the last fifty years this neat division became more complicated when scientists started trying to explain the mind in terms of the natural sciences. The idea that it is equally valid to do this the other way around, to understand the natural sciences in terms of the mind, is seen as quite inappropriate in many circles. But why? It should be clear to everyone involved that *we* are the ones discovering things about the natural world. Even if we accept that if we started over with science and discovered the same things (which is debatable), we still do this discovering with our own tools, senses, and languages in specific humanly embodied contexts. Science is objective because it is intersubjectively cocreated through acts of triangulation.

Mind-Body Options

Part of the divide has to do with the often implicit metaphysical conception of the relation between the mind and body. The mind-body dualism is interesting because it feels right and wrong at the same time. On the one hand, it seems odd that there should be this or any particular duality at the center of metaphysics. On the other, we seem to make this division quite naturally (Bloom 2005). Though this has been challenged as Eurocentric and entails a much bigger debate (White, Kelly, and Nichols 2016; White 2015, 2016a, 2016b, 2017), conceptually speaking, in everyday talk, we nevertheless naturally make the division. That is, when any human agent speaks of her own thoughts or thoughts of those around her, she is dealing with nonphysical things.

Even though conceptually it makes sense in some contexts to distinguish between minds and bodies, if we wish to remain metaphysically monistic, there are only a few options. As many have said, the first two options are to get rid of one of the sides of the dualism: we can reduce mind to body or body to mind. In other words, all there actually is, is material bodies, or all there actually is, is minds or mind. The former option has been a popular trend recently, perhaps because we can see material bodies but cannot see minds. Psychologists study minds, which often means they study the behavior attributed to minds. Rather than "explain," I think many humanists "explore" the mind, whether through art, music, religion, or history. This is also what most humans do, with or without knowing it. That is, a great deal about what we value as human beings cannot be seen because it is mental.[1]

Another thing humanists do is explore the conditions of possibility for the existence of modern science (Foucault 1994; Latour 1987; Felt et al. 2017). They see science as a historically contextual system constrained by language and culture. In other words, science does not transcend our human minds. Ironically, such scholars often make it seem like their own scholarship does do the transcending. Rather than getting trapped in that slippery slope, there are other options.

A third type of monism would be one that says there is some third term that metaphysically captures both mind and body. In other words, there is one other "substance" from which each of these emerge. Most American pragmatists took this direction, whether as neutral monism or anomalous monism. A fourth option, which I think is closer to the pragmatic notion of anomalous monism than it is to any dualism, is pluralism: there is a multitude of primitive substances that do not reduce to one another (Rorty 1998). These are metaphysical issues that go back to ancient traditions but are renewed now in discussions of cosmology in physics (Kripal 2017, 2019).

Why am I bringing metaphysical points up in a chapter on fiction? One reason is that in our deepest philosophical traditions we cannot agree on what counts as real (i.e., substances, relations, freedom, propositions, minds, souls). Science cannot escape from this, because at its foundations it must make assumptions, whether implicit or explicit, about metaphysics. Different theories in physics have different metaphysical conditions. Take Newtonian physics, which is a commonsense physics that explains everything we need to know about the motion of medium-sized objects around us. Its metaphysics can be understood in the basic mathematical concepts that underly it: the force of any object is its mass multiplied by its acceleration in Cartesian space where space and time are separate. Newtonian physics at the level of medium-sized objects and small speeds was not disproved by newer theories. Rather, when new observational tools were invented to see the very small and very large, this theory no longer could explain them. Additional theories were required with entirely different ideas about what counts as real (Tegmark 2015b). With more recent sciences of the very large and very small, counterintuitive imaginative theories often precede the instruments and methods used to confirm them.

In other words, as postmodernists say, we have fictions all the way down. But unlike relativists and like most scientists would say, some fictions are better than others, depending on our purposes. From this perspective, any epistemological notion of truth (“big *T*”) has to accept that such Truth is something science never quite reaches. Even in the sciences, we do not know what is real until we discover it. Fortunately, the semantic notion of truth is more grounded.

To understand religious systems, I think the comparison between fictional and nonfictional (or “real”) language is productive. Scholars of religion distinguish between superhuman agents and fictional agents, and philosophers distinguish between real agents and religious agents. The semantics of these discussions revolve around the relation between fiction and nonfiction (Penner 1970). In this chapter I want to explore the comparison a little more deeply, try to get to the heart of it, and argue that we are stuck with a blurry line between fictional and religious agents.

Fiction versus Religion

The binary between religion and fiction plays out in cognitive approaches, most famously in so-called Mickey Mouse, Santa Claus, or Zeus problems. The basic issue in these cases concerns differentiating the special agents in "religions" from other types of special agents. Scholars argue that the latter are fictional, the former are "real." In other words, the assumption in most of these studies is that special agents in religions, like Zeus or God, should be differentiated from "fictional" agents like Mickey Mouse. Various solutions have been offered, but the problem remains, partly because there are no categorial grounds to make a sharp differentiation. In other words, the semantics of these characters is the same. These are the same types of agents. Sometimes they are implicated in "religious" systems.

The closest anyone has come to systematic differentiation is the scholar of religion Ilkka Pyysiäinen. He notes two previous solutions: so-called religious agents are different from Mickey Mouse because such agents have strong emotional commitments toward them, or, following Boyer, they are strongly socially and inferentially relevant. According to Pyysiäinen, from his and Boyer's perspective religious beliefs "are just like common sense beliefs: unreflective natural intuitions," and it is not these natural intuitions but the inferences drawn from them that distinguish "believers and non-believers" (Pyysiäinen 2003, 111). So we need to focus less on the particular agents themselves and more on the inferences about them.

From this inferential perspective, Pyysiäinen hypothesizes that "religious belief is possible partly because it exploits the evolved metarepresentational mechanisms that make the representation of fiction possible" (116). Take planning, for example. In order to plan something, such as a weekend trip or a hunt, we usually need to play out various scenarios in our heads. These scenarios are not "real" but "fictional"; they are subjunctive simulations: if we do this, then such and such. Pyysiäinen approaches the mind like it is a computer, so from this picture, when we simulate, we run a kind of memory buffer in our minds where certain information is marked as neither true nor false. In other words, such conditions, along with other forms of pretense such as complex play and creativity, “make inferences about propositions the truth value of which is undecided. In such case, the results of reasoning processes must be kept insulated from one’s database of beliefs until the truth or utility of the initial proposition is decided” (114).

Religious beliefs are thus a by-product of something quite central in our ability to think: insulation or compartmentalization. Rather than insulation as a metaphor, a stronger idea Pyysiäinen proposes is that of information management—that is, “specific systems of procedures, operators, relations, and data-handling formats regulate the migration of information in the cognitive architecture” (Pyysiäinen 2003, 114; see Tooby and Cosmides 2000). The idea that religion is somehow related to how minds manage information is an important one to hang on to. The difference between cognitivists like Pyysiäinen and Davidsonians, as we will see by the end of this chapter, will boil down to how distinctions are made between different types of information.

Decoupling the truth value from a chunk of information is what makes it possible to think (as noted above), but there has to be a control mechanism in place to keep track of such decoupling. Pyysiäinen proposes that this management involves a kind of representational marking. Since some (or most?) semantic information seems generally unbounded—that is, not tied to any specific mental “module”—it is allowed to “migrate in an unrestricted fashion throughout a cognitive architecture and to interact with any other data present in the system.” Pyysiäinen finds that the simplest management solution “is to leave true information unmarked, and to mark all other types of information. Such marking is carried out through metarepresentations” (114). The marks or tags on information, following Cosmides and Tooby, are agent, attitude, anchor, proposition, and time tags (115).[2]

So where does that leave fiction? Fiction and religion derive from the same cognitive and evolutionary conditions of possibility. But from this point in his article Pyysiäinen trails off and does not explicitly address the differences. He does not connect the dots. One gets the sense he thinks the difference is something about the tags, but he does not systematically differentiate between the tags in fiction and religion. Ultimately, for Pyysiäinen religious belief depends on three related factors: first, “a cognitively fluid mind that is able to transfer features of representations across domains," second, metarepresentation, and third, somatic marking (123).

Despite Pyysiäinen's take on fiction giving us our best shot at differentiating religion from fiction, ultimately, I do not think he gives us an airtight case to do so, for a number of reasons. The first gets back to the question of definition. Is "religion" or "religions" a suitably natural concept that could be explained in terms of cognition? Probably not. It is more likely that what can be explained is something like fictional thinking or decoupling, with religion a by-product of this. From the perspective above, it is clear that any "fictional belief" about an agent could potentially become "religious" and vice versa. Very little differentiates them cognitively.

Most scholars of religion in recent years do not think the concept of religion really refers to anything. From an anthropological perspective the concept has never had much success as an explanandum in isolation (Goody 1961). And lately, as noted, scholars of religion think it makes more sense to explain the ideologies and politics behind the use of the term. Cognitive science of religion thus appears to be outdated, ironically trying to hold on to an unnatural term. I think Pyysiäinen implicitly makes this point; he first tries to account for fiction and then says this is useful for understanding religion. We should push this further and claim that in order to understand and explain religion from a cognitive and evolutionary perspective, we must first explain fiction and the potential for human creativity, genius, and imagination.

The second reason is the definition of fiction. Pyysiäinen seems to see it as a genre, along the lines of literary fiction (Pyysiäinen 1999, 115). But he is operating with a correspondence theory of fiction that could be called into question using other theories of fiction. For example, from a perspective that does not see truth primarily in terms of correspondence, one could argue that our world is mostly fictional because we cannot communicate without fictionalizing. The connection between language and world is not as tidy as Pyysiäinen and other representationalists would have us believe. Even in our "secular" age, we operate in a world of useful fictions. Fictions are what provide potential for disagreement, and this is what makes them far more interesting than "facts."

In sum, something about the relation between “fiction” and “reality” helps us to understand and perhaps even explain religion, but we are not quite there yet. I return to this issue below, but before doing so, I present a theory that claims this ability to make fictions was at particular times and places adaptive and can offer an explanation of religions.

A Natural History of Fiction

An adaptive case has been made by Donald Wiebe following Peter Munz. I have discussed his argument elsewhere and so will only briefly summarize it presently as it connects to the points above (G. Levy 2021). The main idea is that in certain contexts beliefs in friction with truth can serve as costly signals that augment group membership or solidarity—that is, they help create the distinction between those within a particular group and those outside. Munz’s picture is in some ways quite the opposite of Pyysiäinen’s. Religious beliefs are certainly not “just like common sense beliefs” (Pyysiäinen 1999, 111); rather, religious beliefs are part of “mendacious culture,” a class of beliefs protected from criticism so that they can be used for “social bonds” (Munz 2014, 283). For Munz, this knowledge is used for “non-cognitive” purposes. This form of knowledge is part of what allows complex societies to emerge. In effect, he thinks, we move beyond natural selection once we start building artificial knowledge and institutions.[3]

For Munz, there was a time before “culture” when knowledge or information was tied quite closely to environment. Munz thinks this tie to environment changes with culture, when knowledge then becomes used to create social bonds and keep groups together. To do so, this type of knowledge had to be isolated from “confrontation with the environment” (283), otherwise it would be just like other types of knowledge. For social bonds, then, “false knowledge, artificially protected from rational criticism” is “as effective as, if not more effective than, correct knowledge” (283).

This type of knowledge is better for bonding because it is not constrained by the natural environment, not “fit to nature,” but rather is passed on by social education in all human societies. In fact, Munz thinks, the more absurd the better for such purposes (292). For society’s sake, such knowledge must be protected against criticism. He finds that religion thus fits into a paradigm that he calls “the adaptive prostitution of knowledge” (295). However, a new development has taken place in recent years where societies have emerged that do not base principles of inclusion and exclusion on artificially protected knowledge (293). This new attitude toward criticism in these societies “has made the development of rational knowledge about the natural world and human societies, possible” (293).

For Munz, evolution is a general term for the development of nature. Thus molecules and even atoms can be said to evolve. Biological organisms also of course evolve. All of this evolution involves “knowledge”—that is, the unconscious trials and errors of evolution are in some way stored in nature, are retained, perhaps in the DNA. With “consciousness” evolution takes on new characteristics—that is, much as Pyysiäinen describes, for Munz consciousness is a kind of simulation. It allows for “images,” alterities and artifactual copies, which can eventually be the subject of criticism (298).

Consciousness could have been put to great use in that initial moment had it been “exposed to tests and experiments so that wrong conjectures could have been eliminated” (299). But it wasn’t. For Munz, this unfortunately “delayed” the coming of science. Instead, consciousness as “spiritual (noetic) awareness” leads to sensory images that in turn give rise to “myths and rituals, to stories and performances which are biologically unnecessary but which bear witness to, or express, noetic awareness” (300). We had practical knowledge (what to eat, how to build huts, etc.), and these new spiritual propositions, or “‘extra’ knowledge,” would have been completely eliminated had they been “exposed to natural selection.” They were not exposed because they served an “oblique usefulness”; they had another function, as noted, serving as a useful social bond. Ordinary commonsense practical knowledge could not have served this purpose because it was presumably available to everyone. Thus only “‘false’ knowledge can, in this sense, be sufficiently exclusive of beings which belong to the same biological species” (300).

Inculcation of such “false” knowledge, what Munz calls “epistemological lunacy” (301), happens through education and has an enormous advantage initially, allowing for not only solidarity but efficient division of labor, creating “stable social structures across several generations.” To protect such knowledge (from nature), it must be held dogmatically, isolated. Individuals with deviant ideas are treated as dangerous. Within this structure, the “cognitive apparatus” can still develop, albeit within this artificial, false web of knowledge, which extends “from the acquisition of reading and writing to the cultivation of quite complex intellectual discussion” (302).

From this point Munz breaks away from his argument and begins a long digression about the relation between science and religion. He does not follow through on the points about epistemological lunacy. Don Wiebe extends the argument to say religion functioned in this way to keep social groups together. At the beginning of the Anthropocene, this was a necessary feature of our behavioral immune system, when new diseases began to spread like wildfire through human populations, because we became more sedentary and domesticated certain animal species (Wiebe 2013). Before the Anthropocene and now, the function does not operate, according to Wiebe.

For my own purposes, Munz’s argument from the 1980s leans a little too close to a version of scientism Mikael Stenmark calls “redemptive scientism”: the idea that science “is able to offer us salvation” (Stenmark 1997, 27). It also fits into what Stenmark calls “comprehensive scientism,” roughly the idea that “science alone can and will eventually solve all, or almost all, of our genuine problems” (30). I propose that one of the main reasons Munz falls into this form of scientism is that he endorses a correspondence view of truth. In other words, in his view there are two types of knowledge, one that corresponds to physical nature and one that does not. We will be saved when the latter is eventually weeded out.

Pyysiäinen and Munz, among many others, find something not quite right about religious beliefs. They find these beliefs are not tied to nature or reality in the same way as other, more grounded, types of belief (unmarked information for Pyysiäinen; common sense knowledge for Munz). For Pyysiäinen religious beliefs are the by-product of our ability to fictionalize and are communicated and retained as second-orders. We have them because people we respect or fear have them. For Munz, because they are not tied to nature, they are useful in creating social boundaries and groups.

I think both Pyysiäinen and Munz take realist, correspondence positions with regard to the relation between language and world. Their ideas about falsity and fictions fit into this representationalist paradigm. What if we were to understand truth and falsity not in epistemic terms but as semantic concepts first and foremost, as Davidson does? These are not concepts only for capturing a correspondence between language and the world; they are principally related to translatability, meaning and nonmeaning. Instead of being primarily third-person concepts, where a scholar thinks she can stand outside the triangular fray of conversation and make judgments upon it, these are second-person intersubjective concepts that we use to understand where we are vis-à-vis another person with regard to meaning. From this perspective, we all have a relatively equal number of true and false beliefs. In fact, these beliefs emerge and disappear only in the context of specific conversations. Beliefs are not in our heads; they are enacted. Religion concerns not fiction, then, but the line between fact and fiction.

Explanations that approach religion from cognitivist or realist perspectives not only tend to ignore the performative context of religion, but they also tend to ignore the semantic content of religion (G. S. Davis 2012). What would an integrative argument that accepts the basic idea of religion as part of "a kind of fiction-generating contraption" (Dennett 2006, 120), but departs from representationalism and stubborn realism, look like?

So now we have come to the problem. In many ways it is the old problem: how we explain the fact that people entertain false and fictional beliefs. As Hans Penner has written, there are a few common solutions: one wrong one is to think that people do not really mean what they say, that their language is somehow a code or symbolic for the real meaning. As he notes, no one has been able to work out the code (Penner 2014, 421). Or scholars resort to functionalism. By contrast, Penner's solution was inspired by structuralism. Such beliefs should be taken literally; their syntax and semantics say something about the human condition. Penner followed Davidson down this route, though Davidson was never all that interested in religion.[4]

My approach, inspired by Penner and Davidson, is to argue that in order to account for false and fictional information, we have to present a coherent holistic account of information and its natural history. In other words, false and fictional information only makes sense in the background of a theory of information, entailing both its history and the metaphysics behind it. In terms of the natural history, it would be hard, but not impossible as we will see, to argue that there is anything like fiction or misinformation in any sense before there are biological systems. Once biological systems emerge, something like triangulation can take place where a primitive sense of fictionality enters the picture. It is only with semantic information where two linguistic agents triangulate that we get robust mental forms of fictionalizing and falsity.

These "stages" are probably continuous from a physical perspective but discontinuous from a conceptual perspective. So in terms of the metaphysics of a holistic account of information, Davidsonian anomalous monism is helpful. As I read him, in this account information emerges out of "one neutral ontology of objects and events" (Glüer 2011, 6), and we are advised to be monists at the same time we are conceptual dualists. When we describe things in mental terms, we use a different vocabulary, a psychological vocabulary that cannot be reduced to the vocabulary we use to describe physical things. There is a relation between the mental and the physical because they are ultimately descriptions of the same thing, but the relation is anomalous. This anomalous relation is why Davidson thought there could be no strict psychological science (in the sense of a physical science; see Glüer 2011, chapter 6).

Davidson did not extend his ideas much toward these types of metaphysical questions. He was more interested in understanding how meaning is possible. More recently, similar ideas have been extended in this direction, notably by Nagel. I think the implications of the two philosophers with regard to the points I wish to make in this text are similar or even the same. As noted, the difference may be that Nagel (2012) sees the dualism between mental and physical things in ontological terms, whereas Davidson sees the difference as a by-product of triangular description. Both, however, think that the mental and physical are each real; thoughts are just as real as physical things.

Nagel's basic point is that if we are going to be consistent in our anomalous or neutral monism, we should not favor either the mental or the physical. If we accept that there are (at least) two dynamical ways of describing nature (for lack of a better word; another term used is "the universe"), the mental and the physical, there is no reason why we should favor one, usually the physical, in tracing nature backward in time. In other words, the story usually goes that the universe or nature was entirely physical until human beings or sentient creatures like us emerged at some point in time. After this point it now makes sense to speak of there being both mental and physical realities or descriptions. This opens the intractable problem of explaining how the mental arose from the physical. Without getting too mysterious, an alternative is simply to say that some version of the mental and physical exist or are valid forms of description all along.

I think there are versions of even hard science that are congruent with this point, for example, Max Tegmark and others who work on information and entropy (Tegmark 2014, 2015a) or in biosemiotics (Davies and Gregersen 2014). Munz also describes nonliving matter in terms of knowledge and information. Order and disorder, after all, only make sense in the domain of the mental, in the sense that these are normative concepts we use to describe the relations between (physical) things. Mathematics most likely does not discover things about the physical (Hofweber 2018). Similarly, logic is not about the physical.

Nagel does a nice job differentiating his position from intelligent design. Indeed, this way of thinking can easily lead religiously minded folks to propose ideas about an intelligent prime mover. But this move is not philosophically necessary. We can simply say that information and matter coexist under different descriptions of nature. More will be said of Nagel as we progress, but to return to our subject of fiction, from this alternative perspective can we make sense of a natural history of fiction or falsity?

One of the earliest sources who brought cognitive approaches to religion was the anthropologist Stewart Guthrie, whose perception-based argument has more in common with our noted pragmatists and Davidson's primitive behaviorism than the claims of subsequent cognitivists who looked at religion from a computational perspective. This is probably why Guthrie is seen as less relevant in current cognitive approaches to religion, often represented as someone who is owed respect for helping to initiate the field but who went astray in his humanist leaning impulses (Pyysiäinen 2013, 6).

His argument was relatively simple: religion is a form of anthropomorphism. He regards anthropomorphism as part of a perceptual strategy we humans share with most nonhuman animals, the core of which is animism, the attribution of life to something. Most organisms must have some way to differentiate between living and nonliving things.

Guthrie regarded this in game-theoretical terms. Organisms make bets. As with many such phenomena, false positives are far less dangerous than false negatives; hence, from an evolutionary perspective it is more likely for organisms to overattribute life or agency.

One of the core biological phenomena Guthrie looks at in order to explain religion is camouflage (Guthrie 1995). Guthrie points out that many religious agencies are invisible—that is, if you think about it, it is hard and sometimes impossible to see gods, spirits, angels, and the like (48). For Guthrie, camouflage is a naturalized form of invisibility that he calls "virtual invisibility," in which "deceptive coloration hides almost all animals from their enemies. Colors, patterns, and structures blend them visually with their backgrounds although they are in full view or, what comes to the same thing, make them resemble specific parts of their environments" (49). He goes on to note the ubiquity of "deception" in living things.

The concept of deception only makes sense in an economy of information. Organisms manipulate themselves or their environment; more accurately, they manipulate the informational context of other organisms to gain benefit, whether as predator, prey, or potential mate. This phenomenon occurs down to the simplest levels of life, and if Robert Trivers is correct, even at the level of the genome, for "selfish genetic elements use deceptive molecular techniques to over-reproduce at the expense of the larger genome" (Trivers 2010, 374). Guthrie notes various techniques that organisms, including plants, use to confuse and deceive other organisms around them, concluding, "Invisibility and ambiguity thus are not unique to gods, ghosts, or other spirits, nor merely products of the human imagination. Rather they, and deceit generally, pervade the relations of animals, including humans, with each other and with plants" (Guthrie 1995, 50).

Deception is the other side of the animate coin. Because deception is ubiquitous in nature, so are attempts to spot it. In many ways the perception of deception is constitutive of the very line between what we consider living and nonliving. Only living things deceive, and all living things deceive in some way. But this point also throws into confusion the natural scientific line between living and nonliving things, because if such a line is constitutive of life, some elements of it must predate life as we know it. Scientists who invoke this line, whether they know it or not, implicitly accept a certain metaphysics; they do so despite the fact that the question of what is life is still one of our basic unanswered questions, and nominalism is of little help.

Guthrie at times seems to understand this point, for he says that perceiving nonliving things, for example, a thunderstorm, as animate "is not unreasonable" (52). In other words, in the context of this informational economy, where organisms are constantly trying to spot the difference between deceptive life—a swarm of insects, for example (49)—and inanimate things, it is rational to view a thunderstorm as animate. After all, "a thunderstorm has considerable coherence, visibility, and tangibility, with cloud, darkness, wind, rain, lighting, thunder and other noise, fresh cold air, and new smells. It can arrive and depart swiftly, often with a rush, and can leave behind 'tracks' of moisture, broken branches, and lightning strikes" (52). Not just thunderstorms but a host of nonliving phenomena blur the line between animacy and inanimacy. As Guthrie notes further, "Some features typical of living things, such as motion, unpredictability, generation of heat, and growth, occur also in some nonliving ones, such as fire, wind, rivers, and crystals" (52).[5] If there is not actually a clear line between life and nonlife as we have typically supposed, and the difference has more to do with the way information is organized (Pross and Pascal 2013; Tegmark 2015a), what is it that organisms are perceiving when they try to spot deception?

I will return to this question, but I bring it up in this context because I think it points to a particular natural genealogy of fiction. Fiction has a deep history that goes back to the origins of life in the sense that even the most basic organisms create fictions by organizing information in certain ways. In the way that some very reputable scientists think information predates life, we can also say that fiction predates life. In this sense Munz (2014) was wrong or not quite right in saying that fictions only first arise with human consciousness when we create an image of our own noetic awareness ("awareness of awareness"; 299). This, of course, assumes the type of dualistic model Davidson warns against.

Indeed, after discussing camouflage and its relation to animism, Guthrie (1995) goes on to discuss the rationality of animism among Western philosophers and thinkers. He concludes that animism is "intrinsic to perception" (61). It is a sound strategy because the false positive of attributing a more complex degree of organization (a living system) is usually less costly than the false negative. For a living system, organic matter is usually more significant than inorganic matter. He goes on to apply this same logic to another layer of complexity that arises among humans with our theory of mind, where the same logic applies. This is the level where concepts such as truth and falsity, Davidson's notion of "human language," and the fictionality of Munz's "epistemological lunacy" begin to reenter the picture (G. Levy 2012).

If Guthrie is right, and I think he is, perception of animism is a core element of "religion" that we share with almost every other living thing. It predates human minds by hundreds of millions of years. So this element is clearly not a cognitive module, a "hyperactive agency detector device" unique to human cognition, but a basic biological phenomenon intrinsic to perception. In other words, it is vastly more ancient and "primitive" than most cognitive scientists of religion are prepared to acknowledge.

To reset our story, we have at least two ways in which to understand fiction. On the one hand, the genealogical roots of fiction trace to the origin of information because the very possibility of information entails an idea of misinformation. On the other hand, as we saw in Pyysiäinen, this primordial genealogy does not cover the whole story of fiction, because at least in the case of human beings, fiction concerns our ability to act, to make probabilistic bets on the basis of inferences. Fiction makes sense in the context of inferentially weighted concepts of falsity and truth. Without these, as Davidson argues convincingly, we could not have propositional content in our communication. Propositional attitudes such as beliefs, wishes, hopes or expectations would not be about anything.

Our attitudes to fiction changed dramatically when human beings began to think about fiction and give it a name. For example, Jan Assmann has argued that one of the prices of monotheism was an incessant focus on the fictionality and falsity of other religions (Assmann 2010). This focus is perhaps something shared by most "axial age" systems, whether various forms of philosophy, various legal systems, and the ethnosciences (Markschies 2010). At a certain point in time, institutions start being built that systematically locate falsities and spot fictions. It is a fair point to say that this search is amplified in the context of monotheistic revelation. The technology of written language probably contributed to these tendencies as well (G. Levy 2014). Biblical prophets are constantly on the lookout for false prophecies.

Davidson on Fiction

If fictionality is a primordial condition of information, it is probably wrong to examine the concept in realist terms as Munz does or in the computer-model metaphor of cognition as in Pyysiäinen. Guthrie is probably more on the right track. Fiction is not primarily about a noncorrespondence between language and world. According to Davidson, fiction not only has to do with inferences; it also involves intentions. Telling fictions is not the same as deception or lying, though he recognizes the connection we have made to deception, noting the point by H. L. A. Hart that fictional language is "calculated abuse" (Hart 1951, 212; Davidson 1993, 301).

Davidson argues that all speech acts have at least three intentions, which occur in a specific order. The "first intention" is that the speaker intends her words to be interpreted in a certain way. The other two basic intentions are (1) the "ulterior" intention, the nonlinguistic ends that a speaker wishes to achieve, such as making money or proving one's cleverness; and (2) what linguists typically call the force of an utterance or inscription; for example, it is intended as "an assertion, or command, a joke or question, a pledge or insult" (Davidson 1993, 298). When we lie to someone, Davidson thinks, the hearer only misses the ulterior motive (the intention to deceive), not the other two. If done properly, the hearer of a lie understands the words intended by the speaker literally and understands the force as an assertion (301).

He goes on to say that "the storyteller does not, like the liar, normally misrepresent his beliefs"; he "does not *assert*," for example, "that Oedipus killed Laius. At most he pretends to assert it" (301). Thus for Davidson, creating fiction involves a rather complex layering of simple intentions. The speaker or author does not pretend to use language; rather, he or she pretends to use a certain force. The absence of this pretense, and a recognition on the part of hearers of an ulterior motive to deceive, presumably, is the difference between lying and fiction.[6] Sometimes we can't tell the difference. For example, I made it almost to the end of the first season of the Netflix faux-documentary series *American Vandal* (2017) before I figured out it was fictional, that all the characters in the (fake) documentary were actors. The actors were not lying; they were pretending.

One might think that fictionality has to do with whether or not the names refer to really existent agents. In other words, *American Vandal* is fictional because the names are fake and do not refer to real people. But for Davidson, fictionality is not about proper names, whether they refer to something real, though he does think we learn what proper names are by initially hearing them used in sentences and contexts where they obviously refer. In other words, for Davidson, "using names in fiction is … a real use of language; so how names function in stories not only can, but must, be how they function elsewhere" (303). When we create speech acts that include superhuman agents or other seemingly epistemically challenged names, such acts are fiction not because of the proper names. Rather, they are fiction because of the intentions of the speaker and whether these intentions are recognized by hearers in the holistic context of their use (total behavior). The meaning of those sentences does not depend on either the ulterior motive or the force, but rather on what Davidson calls "first meaning" (see Frankenberry 2014, 202).

Do people creating and exchanging religious narratives pretend to assert? In some cases they do, just as we all do in our day-to-day interactions. In most cases in the day-to-day context of religions, there is not a clear line between pretending to assert and intending to assert various propositional attitudes about such agents. In many of these cases, the cause of the belief is other people sharing the same belief (as Pyysiäinen noted), usually a person of authority and trust. Probably most of our explicit beliefs are derived in this way, so religion is not unique in this regard.

As we have seen, Nancy Frankenberry (2014) takes this point further, arguing that many religious beliefs, "particularly those whose content is future-oriented, may well be classified as wishes, or as elaborated forms of wishful thinking" (204). When we ask people to reflect on their religious beliefs, many people may recognize they are wishes and hopes. When we wish for something, we often pretend to assert it. In such cases, the line between pretending to assert and wishing is blurry.

Representational Approaches

Dan Sperber had a notoriously ingenious solution to the fuzziness between different types of propositional attitudes. He argued it is wrong to think that propositional attitudes (beliefs, wishes, hopes, etc.) are always attitudes about fully formed propositions. Much semantic content, in other words, is "semi-propositional" (Sperber 1985, 50). We often believe things not because we have evidence, but because someone we show deference to told us we should (Bloch 2004, 2006). Sperber gives an example: Suppose Bob is watching TV when a respected journalist comes on and says, "Stagflation has recently become the main problem of Western economies." Bob believes him, presumably on the authority of the journalist, even though Bob is not quite sure what "stagflation" means. Sperber asks, What is it exactly that Bob believes in this case? He thus sets up a whole new category of semi-propositional content where the content is fuzzy or open. This ability to entertain such fuzzy propositions or "half understood ideas" is quite useful, for it "gives us the means to process information—and in particular verbal information—which exceeds our conceptual capacities" (Sperber 1985, 52–53). Not only religion but science certainly would not be possible without it. For example, Watson and Crick were operating with half-understood ideas about the structure of DNA until they saw the X-ray photograph of DNA by Rosalind Franklin (Maddox 2002). As Sperber notes, acting on the basis of half-understood information is common in childhood. In fact, this is how we learn most things.

Bob may even repeat this statement about stagflation to others without knowing what he means exactly. Countless events like this occur in the course of communication and often go unnoticed. The fuzziness may persist until Bob figures out more what he is talking about; perhaps he never does. I think personality may play an important role in cases like this: some people are more likely to do their thinking out loud; in other words, they rely more on the communicative environment to make their thoughts clear. In layman's terms, they speak before they think. Speaking is part of communal thinking; the propositions are fuzzy on purpose. Other people may be more likely to think before they say anything, to be sure the thought is clear before they speak. But even the latter may benefit from "rehearsing" half-understood ideas in public as a way to figure out what they mean by something. This is why teaching is often the best way to learn something.

Sperber also goes on to make another distinction—namely, between "factual" and "representational" beliefs. We saw this distinction already with Pyysiäinen, who was strongly influenced by Sperber. In Pyysiäinen's terms, factual beliefs are the contents in our minds that go unmarked. Sperber calls them part of our "encyclopedic memory" (1985, 54), content that is simply understood as "knowledge" within our cognitive system and the inferences we draw from it. Representational beliefs, as opposed to factual beliefs, are metacognitive; they are beliefs (either representational or factual) about beliefs. In other words, this is the marked content in our cognitive system. From this perspective, fiction clearly belongs in the latter category.

Sperber goes on to describe the conditions of rationality for holding different combinations of factual, representational, propositional, and semi-propositional beliefs. As we see in figure 2.1, for Sperber it is completely irrational to hold factual beliefs with semi-propositional content, and humans, he thinks, never really do so. It is very weakly rational to hold representational beliefs with semi-propositional content. It is slightly more rational to hold representational beliefs that are propositional in content, and the most rational is holding factual beliefs with propositional content. So for Sperber there is a scale of rationality, but irrational beliefs are actually extremely rare—hence his chapter title "Apparently Irrational Beliefs." Sperber calls these types of beliefs rationally "impossible" in the table. They are only apparent because they are probably more likely a result of a misunderstood encounter between the anthropologist and an individual in the community he or she studies; they are the result either of accidental mistranslation or purposeful confabulation.

	Factual Beliefs	*Representational Beliefs*
Propositional content	Strong criteria of rationality	Weak criteria of rationality
Semi-propositional content	Rationality impossible	Very weak criteria of rationality

Figure 2.1
Relation between different types of content and rationality (Sperber 1985, 58).

Sperber admits that in real life rationality can be challenging. Thus, he bookends his chapter with the story of old Filate, a character in his field notes. One Sunday in southern Ethiopia, old Filate came to Dan and asked him if he would kill a superhuman agent, a gold dragon whose "heart is made of gold, [with] one horn on the nape of its neck" (35). The old man said he would come back the next day with more information, but he never did. This was a man Dan had respect for, who was not drunk or senile, but seemed to hold a very strange belief. If one resists relativism about this problem (that we all live in different worlds), how can we make sense of it? Sperber's answer is that this problem has more to do with Western anthropologists than it does with a native's apparent irrationality. This was clearly a case of holding a representational belief with semi-propositional content: Filate was probably told of a strange beast, something fuzzy—maybe a dragon—by a trader, who possibly heard it from someone else. It made sense he would ask Dan, a white man who probably had better access to weapons, supplies, and vehicles. Perhaps the expedition would bring the two closer together. Filate was probably thinking out loud.

Ironically, Sperber notes that the most interesting part about all this was what he left out of his field notes: his response to the request. When he wrote up the experience as the anthropologist scholar, he made it seem like this could be about some kind of gap between his and Filate's cognition. In the actual situation, however, Dan acted as if the dragon was real. He provided a bunch of excuses why he could not go after the dragon: he did not have a gun, he did not know how to find the dragon, and so forth. Someone observing this conversation would think Dan believed in dragons. He certainly acted like that. Sperber admits he left it out of his field diary out of embarrassment (62). Sperber goes on to say that relativism played an important role in deconstructing the supposed superiority of Western anthropologists, but it was simply replaced by another type of superiority, a way to protect their own identity through the veneer of scholarship.

We see that in the socially enacted situation where we charitably preserve truths, dragons were quite real, even for Dan, the Western-trained anthropologist. This is a case of a fictional thing, or "semi-proposition" (a dragon), being nevertheless real. It is real to the extent that it is part of the performance between Filate and Dan. Since we go through our lives learning and cognitively open, I do not think it makes sense to draw sharp lines between these categories. In the real world, when we are thinking fast (Pyysiäinen 2003, 112), Tooby and Cosmides's informational markings are probably not as important (Tooby and Cosmides 2000). Even when we are thinking slow, there might be good reason to entertain such propositions (as in science) (Kahneman 2011; Oviedo 2015). In sum, there are no clear, hard-and-fast rules for deciding what to count as fictional before we are actually in an interpretive situation.

Problems of Reference

We are still working our way through this basic question about the difference, if any, between the semantic content of religion and fiction; the difference, if any, between propositional attitudes toward Athena, Jesus, God, or Buddha and propositional attitudes toward Wolverine, Harry Potter, ourselves, or Mary Poppins. Sperber gives us some conceptual tools to categorize different types of content from a representationalist perspective.

One problem that remains in all of the theories examined so far, however, is that it is unclear why a term with an abstract reference, something that is not "real" like a dragon or a superhuman agent, should make a difference in terms of representational content. Leaving aside the issue of representationalism, a deep philosophical issue that will take us too far afield, let us assume instead that the content is based on meaning. The meaning of fictional or religious terms has content because of semantic relations with terms in other sentences. In other words, the meaning is not based only on reference but on systematic relations to other terms as they are used in sentences.

Mistaking meaning for reference is a problem even for some Davidsonian scholars, such as Terry Godlove and Frankenberry. They argue that initially we learn the meaning of words in ostensive situations. In the case of names, for example, we initially learn that they refer to specific persons, places, or things around us by triangulating with another language speaker and the world (Verheggen 2013). Once we master this trick, we can then extend names to things not immediately near us and even abstract things we cannot see. For these scholars, there is thus an order to our acquisition of different types of semantic content. Frankenberry, following Godlove, calls this order the "difference between interpretive priority (more abstract matters) and epistemic priority (more concrete matters)," where the latter comes before the former (Frankenberry 2014, 198n3).

However, it seems that once the initial concrete triangulation trick is understood, most semantic content is not of this ostensive type.

Prioritizing the concrete matter of specific persons may then be an example of favoring one side of the dualism, mental or physical, over the other, and thus a move away from Davidson's ontology of objects and events. As Kathrin Glüer (2011) glosses this point, "Davidson resisted physicalism in all its forms, holding no one way of describing the world to be privileged above, or more basic than, the others" (6). In other words, even though all events are physical, while only some events are mental, any event that can be described in either physical or mental terms can never be more physical than mental (261). Instead, the relations between the mental and nonmental have to be conceived of as "holistic relations of global supervenience" (Glüer 2011, 6; see also McLaughlin 2006).

The problem of irrationality from the Davidsonian perspective involves focusing in on the trouble spots where diverse propositional attitudes conflict. This "diversity" is only possible with a massive background of agreement. The agreement is based on the fact that we share the same world and a long evolutionary history, and the fact that meaning is intersubjective. Nevertheless, the world we share is not just the physical world. That is, I am assuming from a Davidsonian perspective that the world we share is not divided between the physical and the mental. Semantic content in its most primitive sense arises from ostensive triangulation—that is, triangulation involving basic perception of the world around us. But the content is not the reference of each individual word.

In this sense, it is wrong to assume that ostension must only involve physical things. After all, we can be shown nonphysical things. The content of language comes from the sentence as a whole, which I heard Davidson describe as a kind of shape. I think he meant this both in the sense that when we create meaning we do it with shapes—shapes of the mouth and tongue, shapes of the sound form, or shapes of movement in the case of sign language or writing. I think he also meant it in the sense of a geometrical shape, like a triangle. A shape is made up of its parts, but the total shape is also something more than the sum of its parts. The meaning of individual words is derived from this sentence shape. So is the reference. The sentence as a whole is true or false, or perhaps neither (Davidson 2009).

Even if we accept the idea that the physical world is primary in ostension, with regard to superhuman agents the vast majority in the course of human history probably *could* be pointed to in ostensive situations. Most have votives, incarnations, image forms, animal forms, statues, or narratives to point to and say, “There she is.” If they do not have that, they leave traces in nature: in cloud formations, smells, and sounds. So in many ways, we are barking up the wrong tree if we think the problem can be solved by saying superhuman agents cannot be referred to in ostensive situations. Most fictional agents like dragons or Harry Potter, of course, also have images that can be referred to.

In thinking fictional and religious agents are not physical, we are looking at them with too much of our Abrahamic, iconoclastic eyes. In these traditions, especially Judaism and Islam, there is a long history of prohibiting the physical representation of the deity. Most religions have not been like this, and this trend is extremely recent in human history. Even in the case of Abrahamic religions, I have argued elsewhere that there is still an imagistic aspect of divinity in the form of written texts, the vast referentiality of God in written form (G. Levy 2014).

Factual Beliefs versus Other Kinds

Let us return to the main thread of this chapter concerning the relation between religion and fictional representations. In more recent years, the cognition of such representations has been taken up and reworked in a useful way by Neil Van Leeuwen (2014). Like Pyysiäinen, Van Leeuwen thinks religious representations have a lot in common with fiction. He also upholds the same distinction we saw in Munz and Sperber between what he calls factual and religious “beliefs.” I put beliefs in scare quotes because one of his points, following Sperber, is that the concept of belief is not used clearly in much academic research. For Van Leeuwen, there are at least two kinds of beliefs: factual beliefs and “secondary cognitive attitudes” such as religious credence. The distinction between them is not about the content of the representation but rather the attitude one holds toward it. Van Leeuwen sees the same issues at stake as our other examined theorists, for unlike factual beliefs, religious credence has more in common with “such attitudes as hypothesis, fictional imagining, assumption for the sake of argument, and acceptance in a context” (700).

Despite a lack of reflexivity about the use of language, specifically the term “religion,” I think Van Leeuwen offers the most useful typology of belief to date. As noted, what he calls factual beliefs look very much like the unmarked knowledge of some of our other theorists, but he adds three important characteristics.

For Van Leeuwen, the first characteristic of factual beliefs is that they are "practical setting independent," meaning they are not parochial within the cognitive system; they do not apply within frames or contexts, but in reasoning more broadly. They are part of our continual tracking of reality. So, for example, even when we engage in make-believe, we still have to be aware of certain physical facts. If we pretend a piece of plastic is a doughnut, even when we are playing, we do not eat the plastic doughnut. Similarly, even in play and make-believe, we still have to be aware of our bodies as they move through physical space. We have factual beliefs about a whole host of things that go unmentioned.

Van Leeuwen rightly sees "beliefs" as action oriented, or dispositional. Factual beliefs tend to guide action in all situations, while other types of beliefs such as "fictional imaginings" are more insulated in the actions they guide. Secondary cognitive attitudes do not wander "unmarked" (in Pyysiäinen's terminology) through our semantic knowledge, but rather remain under cognitive quarantine. Even though in make-believe, when we fictionalize, such beliefs still constrain action, the types of actions are extremely context dependent and temporary in effect. The same constraints apply when we assume for the sake of argument or hypothesize.

The second characteristic of factual beliefs is that they have "cognitive governance," meaning they take priority when we draw inferences to cover gaps in our information. Van Leeuwen calls prioritization the forward cognitive effects of such beliefs. Cognitive governance means "there is an anti-symmetric" relation between factual beliefs and imaginings of the secondary cognitive attitudes (like fictionalizing). The former always take priority in the sense that they can always influence the inferences of the other attitudes, but not the other way around. They are part of the "informational background" (703). This characteristic is basically similar to the first; the first is a kind of governance over dispositions and action potential, the second over inferences.

The third characteristic is that factual beliefs are "evidentially vulnerable" (704) meaning that they will be given up if they conflict with perception, lead to contradiction, or do not cohere with other evidentially vulnerable states. Van Leeuwen goes on to point out that even as children we tend to track the “evidential authority” of people around us, trusting people more who have proved reliable in the past. He also notes that some states, such as intuitive beliefs, “those embedded in our folk biology, folk psychology, folk physics, etc.,” have some but not all characteristics of factual beliefs. These “seem both to be practical setting independent and to have cognitive governance, *without* having evidential vulnerability” (705).

So what about religion? For Van Leeuwen, what he calls “religious credence” lacks all three characteristics. These types of beliefs are practical setting dependent, lack general cognitive governance, and lack evidential vulnerability (706–708).[7] In addition, Van Leeuwen extends his definition of religious credence to include three further characteristics. These types of belief have a “*perceived normative orientation*, are susceptible to *free elaboration*, and are *vulnerable to special authority*” (709). First, by normative, he means there is a value system attached to actions “toward the good and away from the bad.” The normativity has four possible forms: as something to be imitated, in ritual structures, in creating identity by signaling group membership,[8] and lastly in normal reasoning of “Davidsonian” belief-desire psychology (if I desire to be saved, and I believe praying saves me, I pray).

Second, Van Leeuwen thinks religious credence is susceptible to free elaboration as opposed to factual beliefs, which “have a conservative ontology” (711). Third, in religious communities there is a kind of informational “pipeline” between those individuals deemed to have special authority and the rest; thus for Van Leeuwen religious credence is vulnerable to special authority. This is a different type of authority than the “evidential authority” noted above concerning factual beliefs. This pipeline from special authority is similar to what Bloch (2006) calls “deference” and Henrich (2009, 245) calls “prestige-biased transmission” (Van Leeuwen 2014, 711).

Though this heuristic typology is quite useful analytically, I do not think it applies to human reality. As with all of our other thinkers, it appears we have to make some kind of distinction between religious beliefs and factual beliefs, and Van Leeuwen gives a much more detailed perspective about what to look for. The problem is when this analytic picture is turned into something meant to correspond with the way people actually operate. We see a glimpse of this incongruity at the end of Van

Leeuwen's article when he says, "An agent's religious credences comprise a map she uses for short- and long-term orientation in life" (712). It is a map overlaid "on top of the factual map like a colored transparency." This idea of different maps overlaid on top of one another echoes similar ideas we saw before about compartmentalization and isolation, also used to make sense of apparently irrational beliefs. The answer I put in Sperber's mouth was that the differentiation between types of beliefs is a fiction that scholars create, perhaps coming as a result of the gap between the slow-thinking scholar writing in his or her study and the fast-thinking scholar in the context of real communication.

Something about the map metaphor strikes me as wrong. Growing out of the other "dogmas of empiricism" to be rejected and because of his anomalist monist impulses, Davidson warned against falling into scheme-content dualism (Davidson 1974), or the idea that we can neatly divide cognition, epistemology, or metaphysics into a representative scheme, on the one side, and the content it supposedly represents, on the other. This notion of factual beliefs seems very much in line with Davidson's notion of the massive background of true beliefs that form the basis of communication. But from the perspective of the critique of scheme-content dualism, it does not seem right to say that some people operate with a map overlay, while *we* do not; in other words, we reasonable people are the ones who get to decide where the line is between factual beliefs and religious credence.

If Van Leeuwen means to say that everyone has at least these two types of overlays, then things are slightly better. But there are still problems. For example, one could argue that some religious credence is, contra Van Leeuwen, evidentially vulnerable, given the right forms of evidence. For example, if we consider the Talmud a religious text, it is full of examples of evidential vulnerability (Dolgopolski 2009). Perhaps just as beliefs need to be distinguished, religious credence may have more variation than we suppose (N. Levy 2017). Furthermore, Van Leeuwen's effort to define religion in cognitive terms by fiat betrays some arbitrariness that such an approach must avoid. For example, practical setting dependence and prestige-biased transmission are not unique to religious systems.

While something about Van Leeuwen's argument that we should avoid seeing belief as one type of thing strikes me as true, there is also a big risk breaking it into the two categories (factual and secondary beliefs). In

Davidsonian mode, Gardiner and Engler (2015) lay this problem out quite systematically, though others (notably Frankenberry [2014], as we have seen) have been saying it parsimoniously for a very long time. Many cognitive approaches distinguish religious beliefs from other types of belief so that these beliefs can then be explained by methods and theories consilient with cognitive science and evolution. However, in order to discover people's "religious" beliefs, we must engage them in communication. Thus, as a methodological premise, cognitive approaches need "to accept religious adherents as knowing what they mean when they say what they believe, otherwise those beliefs would not constitute relevant data" (Gardiner and Engler 2015, 25).

In other words, we accept that religious persons know what they believe, know how their beliefs function as reasons that cause them to act in certain ways. But "CSR [cognitive science of religion] then proceeds to undermine that premise by explaining the meaning of the beliefs in terms not known to the adherents" (25); in other words, that vocabulary is quickly abandoned and other reasons are offered that would not be recognized by the so-called religious person. The point Gardiner and Engler (and in fact all of us working with Davidson in the study of religion) make is that you cannot have your cake and eat it too. It is both methodologically and theoretically problematic to take the first data as a clue to what counts as religion and then immediately abandon it, if you wish to explain the original data. Thus, cognitively inclined thinkers are in a difficult catch-22. As Gardiner and Engler put the question, "How can we grant second-order knowledge of the semantic content of first-order religious beliefs to religious adherents in a manner consistent with holding that those first-order beliefs are the product of unknown-to-the-adherent causes?" Their answer: The bottom line is "We can't," and "this calls for a change in direction for CSR" (25). Their own answer would follow the Davidsonian paradigm.

In my own reading, I think work in CSR can go a long way to explaining religion. However, the methods scholars in that field have used will never be able to explain the semantics or meaning of religion without explaining it away. Semantics requires taking people at their word about the reasons for their beliefs in the background of their total behavior. Any approach that does not take seriously freedom and first-person authority as fundamental to meaning, in addition to the autonomous and anomalous qualities of mental life that go along with that premise, will not be able to explain the semantics of religion. My approach to fiction is an attempt to do justice to that approach. From a Davidsonian perspective, we all share a massive background of true beliefs intersubjectively, and this is what makes frictions with that massive background possible. Fictions, including religious fictions, are a type of those frictions, but because of the holistic nature of beliefs, no one gets to say exactly where or what those are, other than through conversation and narration. I think there are alternative versions of the mind sciences more in line with this approach that take semantics more seriously and that can be used to understand the semantics of religion. I describe some of these efforts below.

Literal Fictional Narratives

We find a very nice explication of taking semantics (and syntax) seriously in the study of religion in Hans Penner's last attempt to explain what religion is all about (Penner 2009). In relation to cognitive approaches of religion that we have been looking at, there is a parallel problem with regard to issues of fictionality and historical reference in the history of religions. Penner's approach reminds us that when we are discussing semantics from a Davidsonian perspective, this must also entail issues around the complexity of translation. In other words, interpretation is always about translation. Scholars say, look, here are these strange people who take fiction as fact. For instance, in scholarship on the Buddha, scholars tell themselves that "legends of the Buddha are the result of slow degeneration from an authentic, elitist, rational, otherworldly ascetic movement into a nonrational, popular religion, an evolution from history into myth" (vii). These scholars then go on to try to dig through the mythical layers to find the history that reflects the "actual episodes in the life of a historical person." Penner thinks this leads to a huge misunderstanding about what these narratives, and the content of a religion in general, is about. Penner's advice is instead to take the mythical narratives literally.

If we take the stories literally, the line between what Van Leeuwen calls the secondary cognitive attitudes and factual beliefs becomes less clear. Rather than falling into what Van Leeuwen calls the "Single Belief Theorist" view (Van Leeuwen 2014, 706)—that there is only one type of belief with varying nuance—a better approach is to say there is no way to judge the line a priori, but that this must be done on a case-by-case basis in context. There has been a tendency to mystify much of the mythology, making it seem like the line is much sharper, but Penner's translation does not do this. It translates words in vulgar—in the etymological sense—ways.

Thus, you may think that the concept of nirvana is a product of religious belief, but what if this is translated as final liberation? There is no airtight philosophical reason to exclude a belief in final liberation as a factual belief. I am not saying it is; the point is that I do not know. Personally, I regard this theological doctrine as false. But since science has not come close to figuring out what minds and selves are, and scientific cosmology is constantly in a state of flux, if we reject the idea that the physical world and the findings of natural sciences are the only basis of fact, I see no reason to deny it out of hand. This point is especially true if we consider the idea of final liberation in the context of the myths about the Buddha (Penner 2009, 109).

A similar argument applies to other religious narratives. People do not engage one another with narratives and dialogue in religious context devoid of a pragmatically real context. The narratives apply to "facts" as much as anything generated by science. Most scientific studies of religion, especially those in experimental settings where the context forces them to do so, tend to take a spectator view on communication, the view that the researcher stands outside and plays no role himself in the communicative interaction. That is fair enough from a third-person perspective, but this approach fails when it comes to making sense of the semantic content of religion. Like all semantic content, it emerges in second-person intersubjective engagement.

Semantic Enactivism

We have already seen that it makes little sense trying to understand religion by focusing on specific words, because words get their meaning in the context of sentences. Van Leeuwen, in an analytic mode, appears to focus on sentences. But sentences, it turns out, only have meaning in the context of narratives. One of the core arguments in this book therefore is that it makes more sense to speak of religious beliefs in the context of narratives.

For this perspective, our best guide is Daniel Hutto. Hutto argues that the robust mentalizing we do as folk psychologists is, first of all, something only human animals can do. Simple mentalizing, which he thinks is often confused with theory of mind, other animals can do and quite often suffices for us as well. For Hutto, simple forms of mentalizing are possible on the basis of the biologically basic ability to mimic. Second, the robust mentalizing of folk psychology is not possible due to some special module or mechanism in the mind, but rather it rides on second-person narrative structures. Folk psychology, in this sense, is not a spectator sport; thus "explaining and predicting actions from a third-person stance is not only late developing, it is relatively infrequent and far less reliable than our normal intersubjective means of coming to understand others through dialogue and conversation" (Hutto 2012, 6).

In other words, the natural way to understand human communication is not through a detached perspective, "at a theoretical remove from others," (5) but rather in the second-person intersubjective engagement of narrative practices. Reason explanations are not a "subspecies of theoretical explanations" (9) that are like those found in the hard sciences; rather, they are ways of reading other people in light of norms and routines outside of us, "carried by the world" (7), that are necessary only in limited cases where eccentric actions need to be made intelligible. Thus Hutto argues that "folk psychology had (and has) a sociocultural basis rather than a biological one," (241) and that evolutionarily speaking it probably arose rather late in the history of our species, after, in fact, language and discursive practices like narrative making. In other words, communal myth making, like we see in religions, preceded robust forms of folk psychology and in fact made them possible by establishing the norms that such practices ride on (242–244).

Following Davidson, Hutto is clear that

> the fact that [our everyday notion of rationality] is a nonnegotiable feature of folk psychology means that we cannot have a closed system for propositional attitude ascriptions. Folk psychology neither is nor can be suitably reduced to a tractable lawlike science. Understanding actions in terms of reasons is irredeemably disanalogous to the way we understand the behavior of "mindless" entities. (10)

Hutto takes Davidson one step further to argue that it is wrong to think of folk psychology as "any kind of theory at all" (10).

For our purposes, we do not need to go down too far into the analytic-philosophical nuances Hutto is arguing against and with. The point is that there are well-argued reasons for thinking that the primary domain for the specialized type of content humans have in the form of propositions is at the intersubjective or second-person level, where third-person spectator perspectives distort the picture. If we think of Dan (Sperber, not Hutto) and old Filate, this is exactly the problem. The content of that interaction does not belong at the level of Dan Sperber sitting in his office later trying to make sense of things as a spectator, but in the enacted moment of interaction with old Filate. At the second-person level, when trying to make sense of an extraordinary narrative, with his cognition extended into the narrative context, the content includes a “real” dragon, an agent at least as “real” as anything else.

Though Van Leeuwen takes us in a deep and nuanced direction in categorizing different types of belief, the dualist picture he sets up—two layers, models or maps, running in parallel—does not get it quite right. We have seen similar ideas proposed by all the theories thus far, arguing for a certain bifurcation or compartmentalization of the mind. If anything, the real story is the reverse of Van Leeuwen—the strange thing is the “scientific” context, where individuals are painstakingly trained to compartmentalize, to close off much of their imagination. Perhaps what I object to is a subtle assumption that science is the firmest foundation for locating factual beliefs. If we equate factual beliefs with empirical realities of the physical world, perhaps this is true. But this form of monism privileges the physical over the neutral or anomalous. In other words, if we reject physicalist monism, there is no reason to think factual beliefs must be about only physical things. Even Davidsonians appear to fall into this trap, seeing ostension as somehow more basically grounded in the physical.

We learned much of how to even broach this subject from Terry Godlove (1989). It has more recently been taken up by a number of scholars in the study of religion, notably Gardiner, Davis, Jensen (2011, 1999), Frankenberry, Albinus (2015, 2018), and Levy. How can this Davidsonian approach be integrated into cognitive approaches? I think the best chance we have is with work now being done in the genre of philosophical enactivism. Davidson’s work on triangulation, especially his later work on the emergence of meaning, fits best with models from the enactive approach to cognition, which is pragmatic, nondualistic, and emergentist. In this section, I present the basic concepts and metaphysical assumptions of the enactive approach. I take up how this approach relates to semantics in the following chapter.

The enactive approach is a variation of what is nowadays called embodied cognitive science. It adopts a holistic and system-theoretic perspective on the mind or cognitive systems. Its leading assumption is the life-mind continuity thesis, which is inspired by work in biology and autopoietic theory, according to which mental systems can be described by similar principles as biological systems (Maturana and Varela 1980, 1987; E. Thompson 2007; Varela, Thompson, and Rosch 2016).

The enactive approach opposes traditional arguments in cognitive science that adopt the metaphor according to which minds are machines that operate like a computer (Boden 2008). The leading metaphor of the enactive approach is instead the living organism. Minds are alive, like living beings. Living beings should not be understood from a representationalist perspective, because unlike machines that process predetermined information (i.e., a given input from the external environment) and generate behavioral output in an algorithmic manner, living beings do not passively discover and process static, objectively given information. Instead, they are actively engaged in the generation of meaning—meaning that matters to themselves and is cocreated.

The reason is that an organism is a vulnerable and precarious system, “a concrete, fragile assembly of self-sustaining material flows” (Di Paolo, Cuffari, and De Jaegher 2018, 21). Life is not neutral but concerned with its own preservation. As such, life “has no guarantees” (20). The enactive approach thus assumes that cognitive systems qua living systems follow a basic, intrinsic norm—namely, first and foremost, to maintain themselves as the systems that they are.

As a consequence, minds are continuously constructed through the system’s active engagement with the environment and are therefore relational entities by nature. It is only through such active engagement that they are able to constitute themselves as entities, as agents. The two core concepts to picture this double nature of the mind as constructing or producing itself and relating to the world in a meaningful manner are “autonomy” and “sense-making.” Autonomy refers to the identity that the cognitive system seeks to maintain. Sense-making is the behavior, the process, by which the cognitive system achieves this goal. This view resists a dualistic, representationalist standpoint for two reasons.

First, there is no longer a clear-cut distinction between an outside objective world and the inside, immaterial mind. Mind and world are intimately intertwined and brought forth through the system's action (hence the term "enactive"). Life is not neutral, and neither are minds. While the term "autonomy" allows us to describe minds in system-theoretic terms, sense-making brings intersubjectivity into the picture as part and parcel of what a mind is. Minds evaluate both themselves and their interactions with the environment, and in doing so they relate these evaluations to themselves as meaningful. Sense-making, then, even at the minimal level, "is the capacity of an autonomous system to adaptively regulate its operation and its relation to the environment depending on the virtual consequences for its own viability as a form of life. Being a sense-maker implies an ongoing (often imperfect and variable) tuning to the world and a readiness for action" (33).

The second and closely related reason why the enactive view resists dualism is explained by the idea that minds are viewed as embodied. Organisms have bodies. However, rather than thinking of the body as a mere material object (i.e., as the physical body), in the enactive view, bodies are at once subjective and objective entities: the mind is a living, physiological organism that can be accounted for by materialist ontologies, but it is also a lived, subjective body, a center of experience from and by which the world and meaning are disclosed and constructed in a first-personal manner. Minds are therefore neither mental nor physical, but simply both.

What representationalist and functionalist versions of cognitive science fail to account for is that (mental) life concerns *care*. Even in their most primitive form, organisms are normatively structured around this value —"a relation of investment in a situation, its history, and its possible outcomes" (22). The enactive view of cognition argues that the care required to maintain oneself in a precarious process of living provides the context for sense-making. Without the care, no sense or meaning is possible. Di Paolo, Cuffari, and De Jaegher agree with Hutto that one can distinguish a basic form of sense-making more apt to account for simple cognitive systems, from a more complex form of sense-making, applicable to minds like ours. The latter form of sense-making involves propositional content (33). Importantly however, propositional content must be seen holistically—that is, the content of our propositions emerges from the care laden norms of minds that strive to maintain their autonomous integrity.

In line with Hutto's critique of spectatorial views of meaning, Di Paolo, Cuffari, and De Jaegher point out that "information, in the functionalist view, implies an already interpreted and prejudged frame of reference whereas sense-making is precisely the ongoing activity of selecting, modifying, and even constructing such frames, by and for the autonomous sense-maker" (36). Avoiding the dualist picture, they maintain that "sense-making is not an act of 'adding meaning' to a physical coupling with the environment, as if the latter was a vehicle of information that must be communicated to the agent." Actually it is quite the opposite; rather than adding something, in order to make meaning, an agent subtracts from its relation to its environment "by monitoring and responding to only a small and relevant subset of all the influences that impinge on the organism, a subset out of which the organism constitutes itself as a sense-maker" (36).

The enactive approach makes an important elaboration on the idea of sense-making. At higher and more complex levels of meaning generation, minds do not make sense by themselves; instead they also rely on others. By engaging and relating to others, they augment their individual sense-making capacities, constructing meaning together. When sense-making activities become precariously interdependent, something especially the case with "animal bodies," which are capable of moving on their own (45), De Jaegher and Di Paolo call this *participatory sense-making*: "the coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own" (De Jaegher and Di Paolo 2007, 497; cited in Di Paolo, Cuffari, and De Jaegher 2018, 73).

The world we live in is a world of others such that meaning generation also involves intersubjective coordination and cooperation with them. This leads us to considerations of how the basic enactive insights of autonomy and sense-making extend to the realm of human language. Dualist, functionalist, computationalist, or representationalist theories of information and communication fail to see the big picture. As we have seen, since these views are precisely the way cognitive science makes sense of fiction (and religion), incorporating enactivism brings a significant rethinking of how we make sense of fiction (and religion) along Davidsonian lines.

Wrap-up

Many of the theorists I examined in this chapter are voices we will hear again in the next few chapters. I hope some more answers will emerge about the relation between so-called fictional, factual, and religious beliefs. For now, the main point is that from a holistic perspective the boundary is always moving because we live in a world mixed up with all three. As the quotation from Davidson at the beginning of this chapter puts it, “No *particular* points are essential; different direct connections lead speakers by different routes into the same language”—that is, we have no fixed pregiven and essential points that lead us to meaning (Davidson 1993, 308n6).

With regard to fiction and its relation to religion, we have seen how Pyysiäinen, Munz, Sperber, and Van Leeuwen are all on the right track but miss something. Establishing the lines between fact and fiction is not a spectator sport; thus enactive and anomalous monist perspectives do a better job accounting for it. For realist, representationalist theorists, who think there is an obvious correspondence between language and the world when things are true, fiction is not much of a problem. Fictional things involve made-up correspondences between language and the world, whereas real things do not. For someone holding this view, much of this chapter has probably been quite confusing. But for anyone skeptical of such a position—either the realism part, the representationalist part, or the correspondence part—there is good reason to rethink that view on fiction.

I began this chapter saying that there are not any categorial grounds to make a sharp differentiation between fictional agents and religious ones. As we have seen, this is not to say that there is no difference, but rather that there is a continuum between fiction and religion. I do not think there is significant difference in the attitudes either of audience or actor when we compare a person dressed as Mickey Mouse who interacts with people at Walt Disney World and, for example, someone donning a costume and mask in a Hindu ritual who is perceived as being a god for the duration of an evening. However, if we discussed with the participants more deeply, we would likely find a sliding scale, where in the latter situation people believe more strongly that the god, as opposed to Mickey, can causally affect the world (see Petersen 2016, 513). It is sliding, firstly, because children probably do believe that Mickey causally affects the world, though in Western countries they are usually educated out of such attitudes in adolescence. Secondly, even with that said, we can easily imagine that there are some adults who think Mickey has causal effects on the world. I do not think this is as much of a stretch as it sounds. Fictional language has obvious causal effects on the world (Petersen 2016, 506–508; Hongoltz-Helting 2019).

The point also connects with where we started on Nagel's *Mind and Cosmos*. Whether or not one endorses his view, it is clear we have to take it very seriously from a philosophical perspective. Someone who claims to be a monist but favors either a physicalist/materialist monism or a version of idealism will have her own views of fiction. For the former, what is real is what corresponds to the physical world; anything else is fiction until we can show otherwise. The reverse is true for the idealist—a position not admittedly in vogue at the present time—for whom immaterial ideas are real and the physical world is a fiction. But what of the neutral and anomalist monists among us, those who do not think fake monisms work (those that start with an ontological dualism between mental and material), either because there must be some more basic neutral substance, like "nature" or "cosmos," or because we must describe nature or cosmos with two radically different vocabularies about the same thing, "one neutral ontology of objects and events" (Glüer 2011, 6)?

In such a view it is difficult to be strictly realistic, and language certainly does not neatly correspond to the world. Communication within our species is possible under a background of a shared evolutionary history and experience that means most of our propositional background is true and in fact goes unnoticed and *uncognized*. We share a lot of this background with other species, especially mammals, and hence we can also communicate with them, albeit to a far more limited extent. However, robust folk mentalizing only occurs with creatures with whom we share a normative social environment (Jensen 2013). Within these intersubjectively enacted narrative contexts, our utterances have meaning. Fiction and falsity emerge in moments when norms break down and something needs explanation within that intersubjective context. When larger narratives run into one another for the first time, more of these frictions emerge. In the context of modern media, large narratives are much more likely to run into one another. Fictions proliferate. This is a semantic story.

A lot went down in this chapter, but the basic point has been to present previous attempts to make sense of the semantics of religion and describe where they go wrong. Instead of presenting their advocates as strawmen, I have tried to do justice to their arguments. Pyysiäinen is important because he provides the useful idea that factual beliefs are those that go unmarked as part of information management in the cognitive system, and that fiction is a central concept for trying to explain cognition about superhuman agents. Munz gives us the useful idea that fictional thinking, precisely because it differentiates from commonsense factual belief, provides a functional mechanism for groups to differentiate themselves from other groups. From there, I presented an interlude in which I suggested the advantages of alternative pragmatist and monist approaches such as those of Davidson, Nagel, and Guthrie. Sperber and Van Leeuwen then provided us with even more nuanced positions about the diversity of beliefs, their connection to belief-desire psychology, and the rarity of irrational beliefs when they are understood in context.

All the scholars discussed present bold attempts to understand religious language, but ultimately, they come at the issue from the wrong direction. Pyysiäinen, Munz, Van Leeuwen, and Sperber suffer from a tendency toward top-down representationalism, where cognition is seen along the model of a computer. In sum, all fall victim to a form of scheme-content dualizing that Davidson notoriously warns against. Language is not a scheme that we can stand outside of to organize particular semantic content. Semantic content has to be understood holistically. As we saw, even scholars like Frankenberry and Godlove who advocate for a Davidsonian approach may fall victim to such dualism when they think about superhuman agents.

Toward the end of the chapter, I gave a glimpse of the alternative that will be under discussion throughout the rest of the book—namely, Davidson's holistic-externalist relationism. Individual words get their meaning from their place in sentences uttered in triangular interaction, and sentences get their meaning from their place in broader arguments and narratives. Penner's idea was that the only way to understand the semantics of religion is to take such narratives literally. He based this premise mostly on Davidsonian holism.

Hutto and the enactivists in turn give us some tools to ground an anti-representational, holistic account like Davidson's in the life sciences. In order to make sense of religious language and its relation to fiction, I argue we need to understand better the gap between natural information, ubiquitous communication in the natural world, and semantics, a different type of information. Representationalism and dualism cannot solve this problem because they put the cart before the horse.

Whether it was gradual or sudden, the time human beings first became full-blown language users, a period that was probably preceded by communally composed narratives, was when the distinction between fictional and factual beliefs became necessary. In this moment religion was born, and superhuman agent terms began to have semantic content. From the perspective of an epistemic notion of truth and falsity, it may turn out that any particular fiction is epistemically true or false, but the semantic content only emerges in our intersubjective relations.

The holistic alternative to representationalism and dualism with regard to the semantics of religion thus urges us to look at the question more broadly, both in the sense that we have to understand the meaning of terms for superhuman agents in the broader context of narratives, but also at a more basic level in relation to natural information. As we have seen, to get at the problem of religion and fiction we had to rethink concepts of agency, life, and information. It is to these topics I now turn in more detail.

Notes

1. Radical explorations of the mind are starting to make a comeback, even in the academic world, probably because of the new psychedelics (E. Davis 2019; Wyrd et al. 2019). I discuss psychedelics in the context of creativity in chapter 4.

2. "The agent slot contains information about who it is that believes something, whereas the attitude slot contains information about the attitude in question: belief, pretence, lying, etc. An anchor is a primary representation of reality to which an embedded representation refers. A proposition slot is where the content of a belief or desire is stored. A time tag, for its part, specifies when the agent in question held the belief she did" (Pyysiäinen 2003, 115).

3. In this discussion, Munz wrongly claims that "natural selection can be made to cease" (282).

4. I tried in vain to interest Davidson in the subject of religion when I took seminars with him at Berkeley a few years before his death.

5. For more on the theoretical analysis of living systems, see the website of the "Theory of Living Matter Group" at the University of Cambridge, https://www.tcm.phy.cam.ac.uk/tlm.

6. “By twenty, no race-car-driving rebel, I was a guitar player on the streets of Asbury Park and already a member in good standing amongst those who ‘lie’ in service of the truth … artists with a small ‘a’” (Springsteen 2016, xv). This sentiment may go back to Picasso: “We all know that art is not truth. Art is a lie that makes us realize truth, at least the truth that is given us to understand. The artist must know the manner whereby to convince others of the truthfulness of his lies” (Picasso 1923, 315).

7. Van Leeuwen does not think that “religious states of mind” arise from a “separate dedicated system,” but rather from “general, widely shared and widely used human psychological capacities” (709). If this is the case, what metaphysics underlies these types of beliefs? In other words, do they actually cut anything off at the joints, or are they simply a way of categorizing different mental states based on an arbitrary definition of what we think of as “religion”?

8. Van Leeuwen argues, following Sosis and Alcorta (2003), that “the very strangeness of the professed ‘belief’ or the costliness of the non-verbal behavior renders the signal strong and hence a credible sign of allegiance” (710). This point is quite similar to Munz, for Van Leeuwen notes, “This is all strikingly different from factual belief. A factual belief that one rock is heavier than another is not a signal of group membership; nor are factual beliefs generally.”

3 Animal Economies of Information

> *If* psychophysical reductionism is ruled out, this infects our entire naturalistic understanding of the universe, not only our understanding of consciousness. Beginning with biology, and seeping down to our conception of the basic constituents of reality, it makes the currently standard materialist form of naturalism untenable, even as an account of the physical world, simply because we are parts of that world. I assume this hypothetical conclusion will be welcome to reductionists, since it shows just how extravagant and costly a position antireductionism in the philosophy of mind is.
>
> [The evolutionary] process would have to be not only the physical history of the appearance and development of physical organisms but also a mental history of the appearance and development of conscious beings. And somehow it would have to be one process, making both aspects of the result intelligible.
> —Thomas Nagel, *Mind and Cosmos*

In the previous chapter, I made the case that a Davidsonian perspective encourages us to reconsider theories of language or cognition that are (1) overly representational, thinking that there is a one-to-one relation between language and the language of thought; (2) dualistic, postulating a correspondence or mirroring between language and world; and (3) spectatorial, forgetting the central place of second-person intersubjective engagement in all meaning-making practices.

Each of these in turn has consequences for our understanding of the relation between fiction and religion. The first consequence concerns the central idea in semantic holism, that the meaning of words can only be understood in the context of sentences that are in turn embedded in larger structures such as narratives. One of the main claims of this book is that narratives are part of nature, that we can trace their emergence from other types of information at the same time that we recognize changes that are specific to human cognition.

From a holistic perspective on narratives, there is very little to differentiate the semantic content of fictional and religious agents. Their meaning is derived from their place in larger narrative structures. The usual move scholars then make is to say that even if nothing about the semantics differentiates religious and fictional agents, they are still differentiated on the basis of something like salience (Petersen 2016, 513). Religious agents are not fictional for the people who pray to them because they are seen to have real, relevant impacts on their lives. In this way, textual narratives regarded as religious interweave what Anders Klostergaard Petersen calls the "real world" and the "story-world" more tightly than purely fictional narratives. Though pure fiction can do such interweaving, it is more common with religion (518).

I think Petersen is right that the difference between agents in fiction and religion is one of degree not of kind, but our reasons are different. The Davidsonian perspective encourages us to give up ontological dualism. Entailed in this is that we give up a two-world view of this issue. From an anomalous monist perspective, there is not a difference between the real world and story worlds; real and story worlds are part of the same single world. But this does not lead us into relativism because of the third point noted above, the intersubjective nature of truth. When a sentence is "true to the facts," this is not due to some direct correspondence between language and the world, but neither does this mean that anything goes. This is because truth belongs to the domain of the intersubjective and facts emerge from triangulation. When we try to extract ourselves out of meaning-making situations, we get a distorted view of the relation between fiction and religion. Instead, such distinction can only be made on a case-by-case basis in context.

Aside from this problematic, perhaps Protestant, perspective on religion based on the idea of a "two-tiered world" (513), Petersen repeats what I consider an anthropocentric error about the nature of agency, arguing that "extreme perceptivity to search for agency" (509) was a specifically evolved adaptation in hominins (as opposed to something ubiquitous in living things). Nevertheless, I think Petersen is right in the way he pushes the question of the relation between fiction and religion in three ways: (1) toward narrative; (2) toward a discussion of signs and semiotics, or what I refer to below as an economy of information; and (3) toward agency. Despite our difference of opinion about agency, we both nevertheless think it is crucial for making sense of religion.

It is these latter two issues I take up presently. I pick up on the themes from the end of the previous chapter about enactive cognition and move on to Nagel's theoretical supposition that consciousness could be traced further back than present-day science is willing to go. This brings me to Davidson's discussion of rational animals and what exactly his view of rationality entails. From there I return to the topic of agency and its relation to information and consciousness. While moving back and forth between semantic-holism and life-science approaches, I suggest that what I call a natural economy of information must have provided the constellation out of which holistic meaning in the form of fictional narratives arose. Religions are made up of such narratives but also depend on this economy of information to make sense. At the end of the chapter, following an argument by one of the most important early philosophers of biology and an inspiration for enactivism, Hans Jonas, I argue that some religious narratives are partly to blame for the unworkable dualisms in modern science. At the same time, I argue that Judaism—but indeed all religions, even if they are fictional (or perhaps because they are fictional)—has the potential to offer alternative ontologies that may spark creativity in dialogue with the natural sciences.

Agency Revisited

Nagel (2012) suggests that giving up dualistic materialism (as I described it in chapter 1) requires us to abandon "the standard assumption that evolution is driven by exclusively physical causes" and that a more philosophically coherent evolutionary explanation must involve something "more than physical all the way down" (53). Our mental lives are part of the world. If we take this position seriously, it points to future scientific discoveries that will also radically reshape how we understand and possibly explain religion.

At this point in the science of religion and religious-like phenomena, I think we must become more creative at integrating humanistic, social scientific, and natural scientific approaches without falling victim to naïve forms of scientism (Stenmark 1997). This is not an easy task, but it is necessary because anything we wish to understand from a humanistic perspective has to be seen in the context of the evolution of life on planet Earth, and of the human animal as one species among many with whom we share the planet. Evolution cannot explain everything, but it should be part of the story when trying to understand human level phenomena like religion. Taking a broad evolutionary perspective can get us away from overly anthropocentric perspectives at the same time that it allows us to see what is possibly unique about our species.

A major reason we have failed to understand religion results from the historical rupture between the humanities and the hard sciences. In the current paradigm, hard sciences like biology have come to hold a monopoly on studying life. Prominent social scientists, such as Joseph Bulbulia and Edward Slingerland, are going against this trend when they argue that religious studies should be a life science (Bulbulia and Slingerland 2012). I agree with them, but for different reasons. As I read them, they advocate this approach so that there can be full consilience between the human and natural sciences. If the neutral monists like Nagel are right, this cannot happen until the mental and material carry equal ontological weight in the sciences, since both are part of nature. If Davidson and the anomalous monists are right, we are limited conceptually in just how far the consilience can go, or a new vocabulary would have to be developed to take it further.

Along the lines noted in the previous chapters, a unified approach will no longer arbitrarily isolate life and mind from one another. Up until now there have been good reasons for doing so. For example, the related conceptual difference between mind and body has allowed the empirical sciences to advance. Unfortunately, it has led to a stagnation, I think, in the humanities, and possibly even worse problems in the natural sciences (if Nagel is correct).

In the last chapter, we looked at a number of arguments about the line between fact and fiction, some more conducive to Davidson's (and Nagel's) approach than others. If Nagel is right that the current state of natural science is metaphysically flawed, the argument regarding religious language I present is somewhere between science and science fiction. This is because the type of natural, nontheological, scientific theory Nagel has in mind has not been discovered yet.

The study (or science) of religion has a role to play in these discussions. We saw in the previous chapter that from the perspective of cutting-edge cognitive science, minds are more like living organisms or systems than they are like machines, whose agency is programmed by their creator. These living systems do not operate like machines because they have their own agency—a self-imposed teleology, a care of self. This raises the question: What implications does this have for studying religion?

From an anomalous monist perspective, with its externalism and pragmatism, much previous theorizing about religion must be characterized as having an anthropocentric bias that suggests too sharp a line between humans and other animals. In the previous chapter we saw that the fictionality or nonfictionality of superhuman agents is wrapped up with concepts of information and agency in general and in particular with animal agency. I think it was for this reason that Guthrie suggested using the alternative term "nonhuman person" instead of "superhuman agent" to name the characters in religious narratives and practices (1995, 241n1). This makes sense because much of our religious imaginary consists of propositional attitudes and practices about animals and their minds. Over the course of our long evolutionary history, we have paid a great deal of attention to other animals (and indeed plants); we have tried to understand them. The religious imaginary, just like the scientific one, is concerned with understanding the difference between us and them, particularly with regard to agency.

Religion concerns agency in at least three senses. First, as we saw, intellectualist theories often define religion as a communally instituted system of propositional attitudes and practices related to superhuman *agents*. Cognitive approaches often define such agents as being counterintuitive in some sense. Some of the counterintuitiveness involves violations of the norms of folk biology or psychology. Common examples include agents that die and then somehow are still alive (e.g., ghosts or ancestors), or applying agency to the wrong domain. We can call this form of cognition animism. A second form of agency is more rightly called anthropomorphism; this is when we "misapply" humanlike qualities of mind, qualities such as human speech and thought, to something nonhuman. In other words, we mentalize. Some superhuman agents are more like agents with what Aristotle called an animal soul (Aristotle 2015)—they do not seem to have the rich mental life that humans have. But some superhuman agents, especially gods, certainly do. They seem to have minds equally rich or more so than our own. Animism concerns the minimal agency noted by Di Paolo, Cuffari, and De Jaegher in the last chapter. Mentalizing concerns what they and Hutto call the propositional level of mental life.

The third sense of agency about religion concerns the discursive approach to religion that views it in terms of the politico-economic and institutional act of naming something as religion. This too involves agency, both on the part of the scholar who studies religion in this way and in the act of naming. Popular (nonscholarly) use of the term “religion” involves this form of agency.

The first two senses of agency imply a basic question: Do we actually know what the proper domains are for folk psychology and folk biology? In order for something to have a mind, it must be alive. In other words, the concept of a mind does not make sense outside of life. In this sense, as Nagel and enactivists put it, there must be some continuity between life and mind. In terms of Guthrie’s heuristics, both are ways that we describe certain types of organization (Guthrie 1995, 36, 45, 89). Two problems are set up when we think along these lines. One concerns animacy, the distinction if any between living and nonliving forms of organization, and the other concerns intentional agency, the distinction if any between humans and other animals. With regard to religious language, the former is probably less important than the latter—that is, religious language is mostly concerned with intentional agents.

Davidson on Animals and Beliefs

Davidson wrote a much-discussed essay on the topic of the discontinuity between human and nonhuman animals (Davidson 1982). On the surface it appears to draw a very sharp line between human agents and other animals. Though he does not completely reject the idea that other animals could be rational, by which he means that they have propositional attitudes, he does not think it very likely. The main reason has to do with the holistic nature of propositional attitudes. Having one means having “a dense network” of related propositional attitudes (320). Thus, in this sense, you either have the whole network or you do not: “The intrinsically holistic character of the propositional attitudes makes the distinction between having any and having none dramatic” (318). In particular, he thinks the propositional attitude “belief” is important in this regard, because without belief there would be no other propositional attitudes. In order to have a belief, Davidson says, “it is necessary to have the concept of belief" (324). Basically, in order to have propositional attitudes, one must have beliefs about propositional attitudes; in the most basic sense this would be a belief about a belief (one's own or another's).

Lately, at least in the study of religion, there has been a lot of skepticism about beliefs, and rightly so (Asad 1993; Orsi 2011). Scholars interested in defending a semantic approach to religion wish to rehabilitate the concept of belief where the semantic content of religion is placed at the center (Godlove 2002). From a semantic perspective we are not talking about "big *B*" Belief. It is really only with "counter-religion" (Assmann 2010), with protesting forms of religion, that religious systems get focused on practitioners having the correct beliefs, and the concept of belief is reified.

Stanley Tambiah addresses this issue as well, and partly blames it on what he calls "Judaism," in the sense that he thinks modern science is a combination of Jewish and Greek ideas (Tambiah 1990, 6–7, 19, 140). He says that Judaism, by which he means the religious system represented in the Hebrew Bible, was intent on calling some gods true and some gods false. Religion involved the true god, while magic involved manipulating false gods. The false gods still had power, though, and it was for this reason that magic was forbidden. He thinks this is a precursor to the "breakup" when magic, science, and religion parted company. There is no longer room for magic in science.

But this picture is not right. Tambiah presents a Protestant reading of Judaism. Jews, like people everywhere, have continuously practiced magic (Bohak 2008; Levene 2013; Shaked, Ford, and Bhayro 2013). Tambiah gets it wrong because he, like many commentators, equates biblical religion with Judaism. What we call Judaism is rather an outgrowth of the rabbinic interpretation from the first millennium CE of rules, laws, and literature developed in Judea during the Second Temple period (sixth century BCE to 70 CE). If one looks in the Talmud, the real core of rabbinic Judaism (not the Bible), magic was perfectly allowed when done by a sage with the power of Torah behind him. The goodness or badness of magic depends on the context in which it is performed.

In the Talmud, one surely is supposed to have correct beliefs, but it is rarely clear which ones those are because of the centrifugal nature of the text (Dolgopolski 2009). Having correct beliefs is certainly not a cognitive requirement. This idea, that one should have correct beliefs, gets amplified into a cognitive requirement in many forms of Protestant Christianity, where avowing a certain content of one's belief is what actually can get one saved in an eschatological sense. Most religions that have existed in human history were not of this type. This is why anthropologists could rarely go into a community and ask, "What do you believe?" Or when they did, they often got a distorted view of religion (Asad 1993; Day 2009).

Most of our beliefs, according to Davidson, are massively shared and true across the human species. Truth (and thus error) for Davidson cannot be defined. It is analogous to the fabric of space-time in general relativity: it is the underlying contour of meaningful (content-holding) communication, that which holds together meaning and without which nothing could be meaningful. The massive background of true shared beliefs is what allows disagreement to be possible.

In order to communicate with propositions, a bedrock of true shared ("little *b*") beliefs must be there as a foundation. This foundation is also where Davidson's second point of skepticism about the rationality of other animals comes into the picture, for he argues "that in order to have the concept of belief one must have language" (Davidson 1982, 324). In other words, one must have been born and raised in a linguistic community. He does not think there is a one-to-one relation between thought and language—that is, thinking cannot "be reduced to linguistic activity" (322). Nevertheless, "in order to be a thinking, rational creature, the creature must be able to express many thoughts, and above all, be able to interpret the speech and thoughts of others" (322–323). Davidson notes that an animal that is surprised—by which he does not mean that it is simply startled but that it has certain expectations that do not pan out—requires the concept of belief he has in mind, because surprise "requires that I be aware of a contrast between what I did believe and what I come to believe" (326). This amounts to a belief about a belief—namely, that the original belief was false. In this sense being surprised is the type of event that is "a necessary and sufficient condition of [thought] in general" (326).

Surprise Interlude

Davidson supposes that only rational animals are truly surprised. He argues that it is only with the possibility to recognize a contradiction of a prior belief, in the sense of a holistic mental disposition, that we can say an agent has thoughts.

This notion of surprise exemplifies the necessary place that freedom has in descriptions of mental events for Davidson. Under a deterministic model of such events, we would not be surprised. In principle, natural science could come up with a deterministic model of physical events where there would be no surprises. For Davidson, this is not possible for mental events.

Interestingly, neuroscientists and other systems theorists have gotten in on this act. One such attempt was Itti and Baldi (2009), who operationalized a Bayesian definition of surprise. Agentive systems, for example, at the level of sensory perception, tend to react to unexpected information in accordance with Shannon entropy. However, some systems react to such unexpected information with Bayesian surprise, where beliefs are not binary but rather are represented by degrees and probabilities. The Bayesian take on surprise thus must involve "(1) probabilistic concepts to cope with uncertainty and (2) prior and posterior distributions to capture subjective expectations." Subjective expectations are the key to surprise, and this is where Itti and Baldi differ with Shannon's account of information, for surprise "fundamentally differs from Shannon's notion of information … notably, [that] Shannon's entropy requires integration over the space D of all possible data observations," while surprise is relative to an observer (1296–1297). Itti and Baldi argue that surprise, not necessarily information in Shannon's sense, is what draws the most attention.

From our anomalous monist perspective, the cognitive emotional state of surprise is central to what it means to be a rational animal and to what Davidson called radical interpretation (Davidson 1973). The notion of surprise is also central to one of the core theories that aims to unify the various interacting levels of cognition, known as predictive coding based on the free energy principle (K. Friston 2018; Badcock et al. 2019). The idea is basically that any self-organizing system, from neurons to mental state heuristics (K. J. Friston and Frith 2015), will do work to minimize expected surprise. In many of these systems this work has a temporal depth, looking backward to learn and toward the future in anticipation. Put simply, any self-organized system must react to novel and surprising things and integrate them in future behaviors. With regard to religion, certain types of agency may indeed be surprising, but more often we are surprised by the descriptions of events and agents embedded in narratives.

In other words, it may be nothing more than the fact that superhuman agents and the events that describe them in narratives are surprising that make them so memorable. The fact that these narratives are surprising may have more to do with this mnemonic aspect of cognition than the supposed counterintuitiveness of such agents (Andersen 2019).

The notion of surprise ties back to the points I raised about fiction in chapter 2. Fictional narratives are interesting because they tend to be surprising. In one of the few recent large data studies of this phenomenon, Vosoughi, Roy, and Aral (2018) used Itti and Baldi's (2009) operationalized Bayesian account of surprise to examine the spread of "true" and "false" news on Twitter. Using independent fact-checking websites such as Snopes, PolitiFact, and FactCheck to gauge the truth or falsity, they found that the two types of information spread differently. Specifically, they "found that falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information" (1147). This was the case even when they controlled for users who had more followers or were verified on Twitter. Part of their explanation is that false information (or "rumors"), when assessed on a novelty score they devised, was significantly more novel than true information (1149). Not only that, but the emotional valence of the information also differed. When assessed with regard to a lexicon of basic emotions, they found the false news was associated with the emotional language of surprise and disgust, while true information was associated with sadness, anticipation, and trust (5).

Animal Intentions

Davidson concedes that he has not and probably could not demonstrate that language is necessary for thought; rather, he thinks his argument suggests that there probably "can't be much thought without language" (1982, 323). Despite saying all this, he actually thinks we do not have a "general and practical alternative framework for explaining animal behavior" (323) other than attributing propositional attitudes to them, and thus, in this sense, we are justified in doing so. This conclusion evokes Davidson's leanings toward pragmatism. In other words, even though he does not think other animals have propositional attitudes, we are justified in acting as if they do because we have no other framework.[1] We cannot help but use a "pattern of explanation that is far stronger than the observed behavior requires”—namely, the behavior of nonhuman animals (324). He admits that we “connive with our language to make it, and us, seem special” (319). The “seem” is important in the preceding quotation, because it appears that in Davidson’s perspective we are not actually that special.

Davidson argues that on formal holistic grounds we cannot say that other animals have propositional attitudes. It is difficult, if not impossible, to have a conversation with other animals. They do not seem to respond to our linguistic activity in ways that make great sense to us. But in practical terms, attributing humanlike attitudes is the only method we have to make sense of them, and in this way we are justified in doing so. So even though we know they do not have these mental states, we act as if they do. We are justified in fictionalizing about these states. The more we get to know nonhuman animals, especially domesticated ones who at least share in our human domesticity, the easier this probably is.

Attributing overly complex content to an animal’s thoughts can be useful in predicting their behavior, especially if doing so is the only game in town. Other animals clearly have thoughts (even if they don’t have “much”); the trick seems to be trying to observe and interpret their behavior under the difficult conditions of our all-or-nothing holistic conceptual system.[2] In other words, even though semantic meaning according to Davidson is an all-or-nothing affair, thought may not be—there may be a gradient. In contrast, metathinking (belief about belief) is a more complicated layer. We humans face the difficulty of trying to make both systems work with one another. If the argument by Hutto in chapter 2 is right, the holistic level of folk psychology is active much less often than we think, or rather, he thinks Davidson put things “too mildly.” It is not just that folk psychology has a special constitution because of the “normative character of mental concepts,” but further, as noted, “if we challenge a few additional assumptions about the primary function of folk psychology we can take this thought further; there is no reason to think of folk psychology as any kind of theory at all” (Hutto 2012, 10).

As an illustration of the limits of pragmatism, of using our all-too-human method of interpreting but formally knowing something is wrong, Davidson brings up the example of a heat-seeking missile. We can imagine someone who has no better explanation thinking that based on its behavior, a heat-seeking missile “wants” to destroy an airplane and "believes" it could by moving in a certain way. This "uninformed" observer, according to Davidson, might be justified in the attribution, but he would be wrong; we (or Davidson) know better, because we know the missile was built and designed by people who actually had the desires and beliefs our uniformed observer attributed to the missile. Our (or Davidson's) explanation is better because "while still teleological, and dependent on the existence of propositional attitudes[,] … it does not attribute to the missile the potentiality for the rich range of behavior that a thinking creature must have" (Davidson 1982, 323). The moral, I suppose, is that when we can avoid attributing the riches of a thinking creature to the nonhuman world, we should do so (because it is false). He admits that with other animals this is far more difficult, because we are much more like other animals than we are like missiles.

The difference between Nagel's and Davidson's versions of monism is tied closely to their ideas about the significance of language. For Davidson, once rational animals who are intentional agents exist, at least two possible yet incommensurable descriptions of nature are possible, one mental (or conceptual) and one physical (or material). The dualism is to be explained as a feature of languages; making sense of the universe is embedded, for better or worse, in linguistic concepts, or rather, we can only make sense of it through intersubjective triangular communication that relies on mental terms; the second person is more fundamental in this process than the first or third. Nagel offers a more explicitly metaphysical argument, that the dualism should be explained by tracing metaphysics backward. The universe does not magically create something from nothing, so there must be precursors to consciousness that derive ultimately from something even more fundamental than mental and material things.

Both philosophers make good points. After all, what Davidson calls language must have a history, probably an evolutionary one. In other words, human language did not suddenly appear in the universe all at once; it was preceded by other forms of animal communication. In principle we can trace all forms of communication back, probably to the earliest forms of life and agency. The difficult question then becomes whether we can trace it back further to even more minimal forms. Even from the Davidsonian perspective just discussed, it appears that we are pragmatically justified in describing all living things with propositionally conscious terms, even though these are excessively powerful to that task, but doing so with nonliving things, such as a heat-seeking missile, seems a step over the line.

There are only a handful of scholars interested in accounting for the gap opened up between the mental and physical in Davidson's terms. Davidson was notoriously vague, even accused of magic, and in fact thought it impossible to characterize the exact emergence of propositional thought, because we lack an appropriate intermediate vocabulary (between describing in nonmental and mental terms). Hutto and Glenda Satne have approached this issue head on; they think the answer comes in the enactive approach and what they term "relaxed naturalism" (2017, 133). Their answer appeals to Ur-intentionality and teleosemantics, the idea that there is a basic, naturally primitive form of intentionality in living systems that provides a "platform" for more robust forms of intentionality (Hutto and Satne 2015; see also Heyes 2018, 27–30). To get at this platform, let us return for a moment to the concept of agency in enactive cognition.

Enacted Agency

Enactivism is useful as a supplement to Davidson, moving into naturalistic territory that Davidson never ventured, while still remaining true to his holistic impulse. Di Paolo, Cuffari, and De Jaegher give us a precise sense of what a "naturalized concept of agency" entails from an enactivist perspective (2018, 36). This naturalized definition, they claim, is "something the sciences of the mind in the functionalist frame have so far failed to achieve." If they are correct about this failure to conceptualize agency accurately, certainly scholars of religion cannot yet claim to explain religion on the basis of the concept of agency, whether in terms of an intellectualist definition, or in terms of violations of evolutionarily adapted intuitive beliefs.

After discussing autonomy and sense-making, Di Paolo, Cuffari, and De Jaegher move on to "living bodies." Following Barandiaran, Di Paolo, and Rohde (2009), they provisionally characterize natural agents as having three basic requirements (see also Di Paolo, Buhrmann, and Barandiaran [2017]): self-individuation, interactional asymmetry, and normativity. Self-individuation means agents are "individuating entities distinct from their environments" (36); interactional asymmetry means agents sometimes modulate their "coupling" with the environment, in other words, they are capable of “changing the conditions that affect how they relate to their surroundings”; and normativity means agents modulate that coupling using norms, “that belong to or have been adopted by the agent itself” (Di Paolo, Cuffari, and De Jaegher 2018, 37). These are requirements that specify what makes it possible for agents to act. As far as I can see, these requirements also set up the minimal conditions for what it means for something to be alive. Agency and life come along together.

As noted, the idea that religion has something to do with animation, life, or agency goes back very far. For a while it seemed one of the things religions often do is pay attention to the life force. The story goes that early man noticed a difference between living and dead things, and from there the notion of the soul was born (Guthrie 1995, 22). More recently, scholars have become more nominalist about these ideas. There is not really a life force; rather, what we have is a series of complex physical and chemical reactions that form a biological system. Early man, or religious man, mistakenly makes a metaphysical idea out of something that can better be explained by science.

I am not going to endorse vitalism outright, the idea that there actually is a life force. A better way to approach this issue is to suggest that science must posit continuity between life and nonlife. In other words, science needs to explain how a nonliving chemical system can develop or evolve into a living system. At a certain point in the process, the nonliving chemical system must develop the three requirements our enactive theorists set out. At a certain point the chemical system becomes an organism that acts in and against its environment and against entropy, creating “hot spots of order, humming with information, with process serving process” (Guthrie 1995, 45). Whatever explanation one gives, the basic postulates and mechanisms do not suddenly emerge in the universe when life begins; they were there before. In other words, if we do not want to go with the “magic” of anomalous monism, from a neutral monistic perspective, we must say nature, or the universe, has within it the potential for life.

My point for now is that even from an anomalous monist perspective it is not all that clear where the lines are between life and nonlife. As Guthrie puts it, there is “persistent, real difficulty, for everyone, in distinguishing what is alive from what is not” (40). Explanations of religion that claim to know when it is a mistake to attribute life to something therefore are putting things in the wrong order. From a scientific perspective we do not really know. As a point of fact, there are invisible agents all over the place that are sometimes “trying,” or at least are acting to kill us—namely, viruses and bacteria of all sorts. There is some debate about whether viruses are living, but the point still stands. There are millions of agents inside us that in some sense *are* us (Maynard et al. 2012).

As in Davidson’s argument, perhaps formally we may be wrong in attributing agency to a virus or a storm, just as it is wrong to attribute propositions to a dog, but practically we are often justified in doing so. Paying attention using a slightly overly complex heuristic may be the only choice we have. In the more extreme case of a storm, understanding its “behavior” in this way can be quite useful. Traditionally this argument comes in terms of bets, as noted nowadays in the language of predictive coding and free energy, where self-organizing systems are geared to react to surprise (K. Friston and Kiebel 2009). In many cases it is better to be safe than sorry when the costs are low for attribution. I think what these theories get wrong is seeing the error in binary or realist terms.

Guthrie’s approach was always better than most that came after him because he recognized that perception and interpretation are coupled together. But perhaps something that most undermines anthropocentric cognitive research on the perception and attribution of agency is that humans are not the only organisms that do so—almost all animals do. Further, perceiving and attributing agency is not just something animals do; rather, it is a constitutive aspect of being even the most primitive agent or organism. Thus, this propensity could not possibly be explained by telling a story about our human past. To repeat: the attribution of agency goes so much deeper.

In trying to understand this mentality that seems so central to religion, we have to go much further back in our evolutionary past, into care and basic feelings. The most basic elemental actions of an agent with regard to its autonomy and care of the self have been proposed as the freeze, flight, or fight response.[3] When care is threatened or perceived to be threatened in a salient way, often because of a predator, agents become “afraid,” launching into action in relation to the environment. The strategy will be enacted based on the context in the environment.

Part of what a focus on these amygdaloid aspects of saliency shows (Öhman 2005; Andrewes and Jenkins 2019) is that the line between human mentality and nonhuman mentality is porous—and even more so the line between animal agency and nonanimal agency. If Barandiaran, Di Paolo, and Rohde are correct and these requirements about agency are indeed constitutive of what it means to be a living body, then even the most primitive organism must meet these requirements for us to consider it alive. This is also the most precise way to differentiate a living from a nonliving system. There is actually nothing magical that happens when a nonliving system "evolves" or develops into a living system. Some of the processes carry over and the system is reorganized, but presumably this happened through a small tweak, not a radical reshuffling.

Dynamic Kinetic Stability

Agency goes back deep into the history of life, and perhaps deeper back in the history of the universe, a field of knowledge studied in biophysics. As early as 1981, the codiscoverer of DNA, Francis Crick, waded into these discussions. He begins his book *Life Itself* with a description of the unique character of the carbon atom, which has the ability to form multiple stable bonds with other atoms, including itself (Crick 1981). He then goes on to present the theory that has come to be known as panspermia, that life originated somewhere else in the universe and was brought to earth by some means such as an asteroid impact. At the conceptual level, scientists still wonder about what the defining features of life are.

More recently, in their article "The Origin of Life: What We Know, What We Can Know, and What We Will Never Know" in the journal *Open Biology*, Addy Pross and Robert Pascal describe one of the likely theories for the origin of life (Pross and Pascal 2013). Pross and Pascal argue that abiogenesis, the process whereby a nonliving system became or becomes a living system, and biological evolution are both part of the same process, "a single continuous process governed by the drive toward greater DKS," (3) or dynamic kinetic stability. DKS is a "kind of second law analogue" (4), meaning an analogue to the second law of thermodynamics (see figure 3.1).

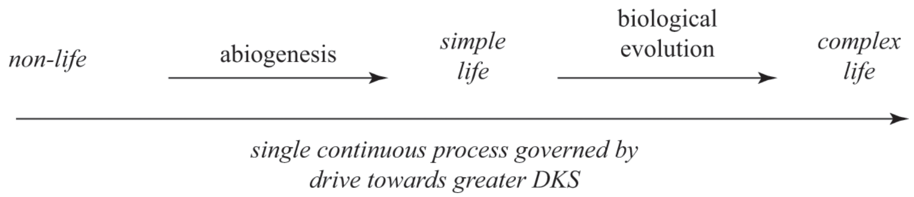
non-life
abiogenesis
simple life
biological evolution
complex life
single continuous process governed by drive towards greater DKS

Figure 3.1
Dynamic kinetic stability (Pross and Pascal 2013).

Their theory has similarities to other theories that also consider living systems to have something to do with the way matter and information are organized in the universe, such as Max Tegmark's theory that has gotten notoriety on the cover of *New Scientist* magazine (Tegmark 2014). The basic point is that in the coming sciences we will have to explain information, life, communication, and consciousness together as part of related processes happening in the universe. If this is the case, I think there will be implications for understanding religious language.

Tegmark, a theoretical physicist at MIT, thinks in order to account for some of the big questions in physics such as the origin of the universe, one has to talk about consciousness. Tegmark's approach is to think of consciousness as a state of matter, like a solid, a liquid, or a gas. The idea is that whenever you have organized systems (even nonliving ones, such as a solar system or a mix of interacting nucleic acids before life is formed), or what Tegmark calls "information" processing, you have consciousness (Tegmark 2015a). In other words, inanimate things have consciousness to the extent that they are part of informational processes. In religious studies, this is an old idea, known as panpsychism (Davies and Gregersen 2014; Kripal 2019).

Following Giulio Tononi's work (2008, 2012), Tegmark finds that in order for an "information processing system to be conscious," a system first must be able to store and process large amounts of information. Second, this information must be integrated in a unified whole so that it is impossible to divide into independent parts (Tegmark 2015a, 239–240). In other words, each instance of consciousness is a unified whole that cannot be decomposed into separate components. But Tegmark thinks these principles have to be taken further in order to "ground its principles in fundamental physics"—that is, just as "the key difference between a solid, a liquid and a gas lies not in the types of atoms, but in their arrangement," consciousness should likewise be understood as a certain type of arrangement of matter, a different state of matter. Tegmark admits that he is studying consciousness "from the outside" but nevertheless thinks we can classify its physical makeup (240). From this perspective, beyond the two traits noted by Tononi, he adds that a conscious system must satisfy the principle of what he calls autonomy, which is a "combination of two separate properties: *dynamics* and *independence*" (241).

This argument raises the question: What exactly are we talking about when we talk specifically about information in this context? Information in its most primitive form may be a constitutive element of consciousness that predates life, or, in other terms, life may be a basic property of the universe (Nagel 2012; Pross and Pascal 2013; Tegmark 2015a, 2015b). Even if we do not want to go that far,[4] it seems fair to say that all biological systems, all organisms, have some form of consciousness that is found in how these systems communicate with one another both internally and externally. For my purposes in this chapter, what is most relevant is the nature of information under the energetics of life. Another way to put this is that, with living systems, information becomes communication and should evolve under the constraints of evolution. Biology and meaning are tightly coupled with one another, even down to the level of chemical signals sent between cells (Hoffmeyer 2014). This opens a deeper question that is beyond the scope of this book: How can we explain the emergence of biological communication from nonliving systems? There must be precursors to biological information that explain it.

The point is this: though communication is ubiquitous in the natural world, human communication appears particularly novel in the way that it can embed communication within communication recursively (Fitch 2010, 105; Corballis 2014). What you are reading now is an example of such a communication. Religious and "sacred" texts are such communications. Such recursion allows for complex information patterns to be transmitted and collectively improved. These types of communication are but one form of what I have termed "natural information." Following Nagel, we can say that in order to account for them, such information must be traced back through evolutionary history. We have seen that there is good reason to think life would not be possible without such information. For example, even a unicellular organism needs to "read signs" from its environment in order to survive and reproduce.

Organisms also transmit information that deceives or harms other organisms. As noted, Guthrie points out that deception is a key component of evolutionary history, and attention to invisible agents (that is, invisible predators) may be an important evolutionary root of religions (1995, 48–49). Organisms are thus on the lookout for good and bad forms of information; there is an economy of information from the origin of life. This economy of natural information stretches between unicellular creatures, bacteria, and viruses to mammals, primates, and human animals.

Ethologists studying communication and comparing agency between human and nonhuman animals have found very sophisticated abilities in nonhumans. According to Dorothy Cheney and Robert Seyfarth in their chapter in *Mind the Gap*, however, nonhuman primates lack three features that allowed for human language to develop—namely, "the ability to generate new words, lexical syntax, and a theory of mind" (2010, 293). The last, the robust ability to attribute mental states, they think was the key development that allowed for the first two to emerge in our evolutionary history.

But much else about language, Cheney and Seyfarth believe, has similarities with nonhuman animals. In particular, though nonhuman primates cannot create new words, they are able to use a limited repertoire of sounds to convey articulated "meanings." Some of these sounds reliably convey danger or aggression. For example, male baboons (*Papio hamadryas* spp.) produce two-syllable "*alarm* wahoos" when they see lions or leopards, whereas they produce "*contest* wahoos" that are audibly different. Baboons also produce barks and grunts that have audibly differentiated "meanings" (285). In baboons, this type of communication allows for a limited degree of coordination and display of intention.

I think the type of primitive concepts (or preconcepts) Cheney and Seyfarth point to among nonhuman animals are the evolutionary precursors to the robust semantic concepts we use as human beings. The first of these more-robust but simple concepts were probably those that linguists classify as the universal semantic primes. These are the semantic concepts that form the basis of other concepts and appear universal in our species (Wierzbicka 2003; see figure 3.2). Some of these concepts fit into what I call the uniquely human semantic-syntax at the heart of Davidson's theory that we saw in chapter 1.

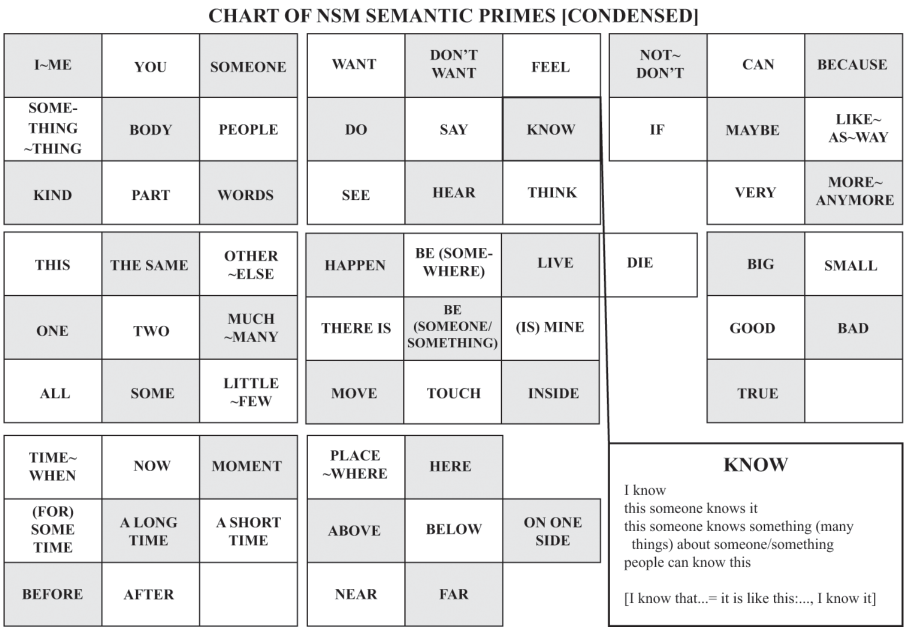

CHART OF NSM SEMANTIC PRIMES [CONDENSED]

I~ME	YOU	SOMEONE	WANT	DON'T WANT	FEEL	NOT~ DON'T	CAN	BECAUSE
SOMETHING ~THING	BODY	PEOPLE	DO	SAY	KNOW	IF	MAYBE	LIKE~ AS~WAY
KIND	PART	WORDS	SEE	HEAR	THINK		VERY	MORE~ ANYMORE
THIS	THE SAME	OTHER ~ELSE	HAPPEN	BE (SOMEWHERE)	LIVE	DIE	BIG	SMALL
ONE	TWO	MUCH ~MANY	THERE IS	BE (SOMEONE/ SOMETHING)	(IS) MINE		GOOD	BAD
ALL	SOME	LITTLE ~FEW	MOVE	TOUCH	INSIDE		TRUE	
TIME~ WHEN	NOW	MOMENT	PLACE ~WHERE	HERE				
(FOR) SOME TIME	A LONG TIME	A SHORT TIME	ABOVE	BELOW	ON ONE SIDE			
BEFORE	AFTER		NEAR	FAR				

KNOW

I know
this someone knows it
this someone knows something (many things) about someone/something
people can know this

[I know that...= it is like this:..., I know it]

Figure 3.2
Condensed version of the "Chart of NSM Semantic Primes" available at http://nsm-approach.net. In the larger chart, the cells include key grammatical frames for each prime, as shown here by the pop-out box for KNOW.

You can think of these semantic primes as those basic words and concepts you would use if you were trying to understand or translate an unknown language—for example, words like *above* and *below*, *good* and *bad*, *inside* and *outside*, *far* and *near*. It also includes basic mental predicates and volitional concepts, such as *want*, *know*, *think*, *see*, *hear*. In terms of speech, it includes basic concepts such as *say*, *word*, and *true* (Goddard and Wierzbicka 2013; Goddard, Wierzbicka, and Fabréga 2014). If we bring this research from ethology and semantic primes together, there is good reason to think that the ability to recreate and improvise the shapes of these sounds emerged after our ability to attribute mental states, as Cheney and Seyfarth argue. If Hutto from our last chapter is correct, this ability emerged rather late in the history of our species.

Misinformation

With communication and information comes the possibility of miscommunication and misinformation. In another chapter in *Mind the Gap*, pioneering ethologist Robert Trivers argues that deception "is a universal feature of life, at all levels and in all relationships both within species and between species, inside individuals and outside, with strong effects on both deceiver and deceived" (Trivers 2010, 373). Organisms such as viruses, bacteria, plants, insects, and animals do it. As noted in chapter 2, Trivers even suggests that deception happens within the genome, for "selfish genetic elements use deceptive molecular techniques to over-reproduce at the expense of the larger genome" (374). He notes that the detection of deception often leads to negative consequences in many species, in the form of punishment, loss of status, and banishment. Indeed, cheater-detection has recently been understood as a major contributor to the evolution of religion (Bulbulia and Slingerland 2012, 596–597).

Organisms, and especially human organisms, thus have something I call an *informational immune system*. I derive this concept from work carried out primarily by psychologist Mark Schaller, who first used the term "behavioral immune system." Schaller finds that just as we have a physiological immune system to protect us against harmful pathogens, so we also have an evolutionarily evolved set of behavioral dispositions to do the same (Schaller 2016). The term *informational immune system* is thus similar but focuses on the level of semiotic and semantic content (Salazar 2018; Bateson 2000).

Aside from other humans, harmful pathogens have been the most deadly organisms in the history of our species, so it makes sense that humans would work out a host of natural defenses against them. What is different about these particular predators is they are invisible, and until the invention of modern medicine, we only recognized them indirectly from their effects on us: runny noses, sneezing, coughing, and other physiological and psychological changes.

Scholars on this track argue that since physiological immune systems are costly, it could benefit an organism to develop alternatives, in this case for humans, behavioral efforts to prevent infection in the first place. Human disgust reactions, it is argued, emerge as part of this behavioral repertoire, as seen in studies indicating that disgust is tied most strongly to indirect indicators of infection (Oaten, Stevenson, and Case 2009; V. Curtis, De Barra, and Aunger 2011). One of the key ideas of the behavioral immune system is that disgust is not just tied to physical indicators of infection, but further to social behavior that poses infection risk, "including unusual sexual acts and actions of other kinds that violate moral codes of conduct" (Schaller 2016, 209). Nonnormative behavior in general elicits a similar response, and because of the better-safe-than-sorry logic of some evolutionary mechanisms (a false positive is much better than a false negative), this system tends to be hyperreactive.

Don Wiebe (2013) has been most explicit about tying this idea to religion. He argues that institutional religions—especially since the invention of agriculture, when population levels rose and diseases began to spread more rapidly from nonhuman animals to humans and humans to humans—have been especially good at creating distinct groupings where the social side of this behavioral immune system played a dominant role. Such religions' "costly signals" and the belief systems built up out of commitment to "'false knowledge claims'" that go along with them create a high hurdle between groups, and such boundaries form the basis of the behavioral immune system. Historical religions, he argues, are thus "natural security systems" (416).

As Wiebe notes, Peter Munz—whom I discussed in the previous chapter—already in 1985 proposed that only what he called "'false' knowledge" or "epistemological lunacy," as opposed to ordinary knowledge (acquired by trial and error and common sense) could "be sufficiently exclusive of beings which belong to the same biological species" (Munz 2014, 300–301). In other words, only this type of "'false' knowledge" could serve to bond specific groups together in opposition to other groups of the same species, because other forms of knowledge would be universal and thus could not serve that purpose. Though he invokes religions, specifically Catholicism in this description, he clearly means any form of solidarity, not just religions. Through education into these quirky "propositional beliefs," an individual has "insulation" (301) from more general knowledge and thus is a proper candidate for group membership. This change generates an era of "intellectual protectionism" (302) extended from "the acquisition of reading and writing" (302) that operates on this new delimited area and in fact leads to increasing false propositional knowledge.

I think Munz and Wiebe have it basically right, though following Davidson I think the proper domain for discussions of truth and falsehood begins at the level of semantics (meaning-making), not epistemology (G. Levy 2012). In other words, Munz and Wiebe are presenting a correspondence theory of truth, truth as an epistemological concept. Munz seems aware of the problem when he refers to "*false* knowledge" by calling it a “contradiction in terms” (2014, 302). Indeed it is. Munz and Wiebe also lean too far toward functionalism, though admittedly most scientists and scholars do not have a big problem with that these days, despite Penner’s important critique (Penner 1989).

Wiebe’s account, along with most cognitive approaches to religion so far, clearly falls under what Di Paolo, Cuffari, and De Jaegher criticize as the functionalist frame in the mind sciences. What are the consequences for understanding religion if we take an anomalous monist approach that enlarges the categories of animism and mind in the manner of enactivism?

All organisms possess informational immune systems, presumably even the most basic life forms. Similarly, all possess agency. Even plants have locomotion but tend to move at a much slower pace than animals. Thus, even plants may have a rudimentary degree of fight, flight, or freeze responses to predators. In animals, these abilities become a more robust response to salient fear. Much of human behavior can be understood in terms of these automated fast responses. But with the rational animals, lower-level systems get reorganized holistically. Once we start discovering abstract but possibly real ideas such as geometric shapes, intentions, or the gods of Homer (Quine 1951, 41), these also organize behavior. As Penner put it in the previous chapter, stories carry literal information, and the information of their parts is dependent on the whole.

A central argument of this book is that information in narratives is connected to natural information, such as the locations and shapes of star constellations and other bodies in the sky relative to one another and their temporal movements, important geographical locations on earth such as springs or other water sources, and mountain shapes. Stories, in the enactive sense, have agency. In this way, Durkheim, Hutto, Mark Turner, and even Penner are providing a similar account about the origin of consciousness in stories (Durkheim 1995; M. Turner 1996; see also Jaynes 1977).

From a Davidsonian point of view, as we saw, in order to have one content-holding (i.e., meaningful) propositional attitude (like a belief), one needs to have a host of holistically interconnected propositional attitudes. So in order to explain the origin of isolated beliefs, one has to propose that belief systems as a whole came first. One way this is possible is if they came in the form of stories, or possibly narrative songs, not authored by any individual person. In this sense, human narratives have preceded individual minds, and in fact make them possible. In other words, distinctively human minds require narratives as a prerequisite. The shapes of such narratives may be something humans discovered about the universe. According to Davidson, this would not be possible without falsity.

Animal Minds

We have seen that the content of religious language is about agency and information. Frankenberry (2014) gives a plausible way to look at the content in a more detailed way, presenting a picture of what the study of religion should look like "after Davidson and Rorty." A crucial part of her definition of religion—that is, a "distinguishing feature for identifying what is religious and what is not"—is "the element of superhuman agents" (196). This feature, though I agree with it, represents a paradox of sorts for semantic holist approaches to religion because it seems to isolate one element, that of "superhuman agent."

What are the grounds for including this very particular element in a holistic definition of religion? There is a long history of this term or similar terms. Penner defines superhuman agents as agents who can (or could) do things you and I ("we") cannot do (Frankenberry and Penner 1999b, 498), but I have always felt this lacking. After all, Michael Jordan can do things you and I cannot do. Some humans have powers or abilities that few or no others have—for example, detectives that never forget a face (Keefe 2016). Likewise, nonhuman animals can do many things you and I cannot do; they are, in effect, already superhuman agents. So there seem to be some problems with this aspect of Penner's definition.

I think this is why later in the paragraph in her essay—after pointing out that scholars of religion do not have access to the actual superhuman agents, but merely access to beliefs *about* interaction with them—Frankenberry changes the terms. It is really the "element of belief in nonnatural causality" that does the heavy lifting (Frankenberry 2014, 196) in distinguishing religious language from the rest of peoples' reports. In this class are such beliefs "that the soul lives on after death; that rituals can change the physical world and divine the truth; or that illness and misfortune are caused and alleviated by spirits, ghosts, saints, fairies, angels, demons, devils, gods, and nats" (196). As I read her, she seems to say that our beliefs normally have a natural form of causality where intentional objects cause ordinary events, while in the case of religious beliefs having to do with superhuman agents, the causality is somehow "nonnatural." That is, following Godlove's well-grounded Davidsonian account of religion, she maintains that "normally, the intentional objects of belief are among the causes of ordinary events, but this condition does not obtain in the case of religious beliefs having to do with superhuman agents" (196).

As argued in the previous chapters, I do not think it has been sufficiently shown that superhuman agents, even "fictional" ones, are abnormal intentional objects among the causes of ordinary events. Putting things in this way smacks of a form of materialism that Davidson's anomalous monism would reject. What exactly does Frankenberry mean that superhuman-agent beliefs have nonnatural causes, if that is indeed what she is arguing? After all, for Davidson mental events can influence other mental events, and mental events can cause physical events, but physical events cannot cause mental events (in a "natural" or lawlike way). Reasons can be causes, but causes cannot be reasons (Glüer 2011, chapter 6).

In this sense, it is worthwhile to differentiate two types of "naturalism." Naturalism1 would refer to the idea that science studies physically observable things in nature, and all there is to nature is encapsulated in these scientific explanations; physicalism would not necessarily have to go along with naturalism1, but it usually does. What if thoughts are part of nature, as I think both Davidson and Nagel would agree? Then we need something like naturalism2, wherein nature includes both the mental and the physical; this more expansive version of naturalism would state that anything that happens in the universe, including both mental and physical events, is natural. From the perspective of naturalism2, superhuman agents cannot have nonnatural causes.

Perhaps an example is in order. We grow up seeing animals all around us, though less in the modern technological world. In the latter case we see them in books, on TV, or on other types of screens. We speak as if these agents have mental states. We interact with them. We think they communicate with us. Perhaps they do. But the point is that these are "real" "intentional objects," and the semantics involved in language about them is completely "normal." Spirits, ghosts, saints, fairies, angels, demons, devils, gods, and Burmese nats (Spiro 1967) are all much more extreme cases. In these cases we mostly have reports about interaction with these agents that we may or may not believe depending on the credibility of the source and a host of other factors (Kvandal forthcoming). But the semantics of these reports is completely normal. It requires no special theory to account for it.

With a strict anomalous monism in place, can we still be correct in saying it is counterintuitive to attribute mental psychology to other animals? I do not think so, especially if we consider our evolutionary past. There is not an absolute line but rather a continuum of agency that stretches at least from animals to humans to superhuman characters. Thus, I do not think a child is at all surprised to hear that other animals have thoughts like our own. In this sense, nonhuman animals are the original aliens, and comprehending them has been central to religion.

As we age, we often grow more and more estranged from the communications of other animals, so attributing mental states to them becomes more unusual and counterintuitive (Abram 1996). Once we are able to act for reasons, to think slowly and recursively, perhaps the distance grows. From that perspective, our consciousness appears like a quantum leap. We are able to communicate content in layers—temporal, physical, perspectival—under a background of shared human experience. It is unlikely other animals possess precisely this ability. But what are we to make of this difference? It is the "counter-religions," in which we should probably include western science, that make the discontinuities so sharp.

As far as religion is concerned, then, many stories involve communication with nonhuman living beings. If I am right, these stories do not stick around because they are counterintuitive and memorable. Rather, they stick around and are memorable because they are intuitive and have something to say. They may be fictional, but some, at least, are true fictions (N. Levy 2017).

Alien Gods

Religious and theological narratives organize thoughts in very particular ways and especially influence the metaphysical assumptions behind those thoughts. In this section and the remainder of the chapter, I explore how the historical rupture between the humanities and the hard sciences is an outgrowth of a certain religious narrative and its underlying metaphysical assumptions.

Categories relevant to the study of religion play a central role in the conceptual challenges to thinking about the origins of life. As noted, in the old days of the study of religion, scholars such as Tylor argued that animism was the defining feature of religious thought. Some human saw another animal die and wondered what the difference was between the dead state and the living one. Tylor decided that religion had something to do with wrongly attributing living characteristics to nonliving things. Primitive people, he thought, had a false idea about the nature of the world; they naively read life into it where there was not any. Modern science, he thought, knows better. More recent scholars in the cognitive approaches to religion basically say the same thing. Religion has something to do with hyperactive animism (reading animal agency into the world hyperactively) and hyperactive intentionality (reading humanlike intentionality and consciousness hyperactively into the world). Most scientific definitions of religion are based on ideas like these, seeing religion as somehow related to minimally counterintuitive agents, superhuman agents, or supernatural agents (all of these concepts have their own complexity).

There are hidden theological principles built into these scientific positions. From a Davidsonian perspective, dualism results from our descriptions, an inevitable by-product of the ultimately subjective fact that we have minds. From this perspective, it is difficult and perhaps even counterintuitive, as McCauley and others have written, to do modern western science, which regards nature and the physical world as mindless (McCauley 2012). Nagel thinks modern science is hopelessly misguided in this quest and, for philosophical reasons, will eventually have to come to terms with its own contradictions. Interestingly, coming from a very different perspective, the great scholar of gnosticism Hans Jonas once came to a similar conclusion. In the epilogue to his *The Gnostic Religion: The Message of the Alien God and the Beginnings of Christianity*, entitled "Gnosticism, Existentialism, and Nihilism," he notes a number of parallels between ancient gnosticism and modern nihilism (Jonas 1958).

His reading of gnosticism saw it as a radically dualist religious system that postulated a false god in control of the natural world. This system was grounded in the "feeling of an absolute rift between man and that in which he finds himself lodged—the world" (327). True Divinity was alien to nature, having "neither part nor concern in the physical universe" (327). Creation is a result not of this true God "but of some inferior principle whose law it executes." "Man" has a part of himself, his true inner essence or spirit, tied to the true God, and therefore that part also ultimately is "not part of the world, of nature's creation and domain, but is, within that world, as totally transcendent and as unknown by all worldly categories as is its transmundane counterpart, the unknown God with-out" (327). The world is created by the fake god not out of knowledge or wisdom, but rather "proceeding from the spirit of self-assertive power, from the will to rule and coerce" making Power "the chief aspect of the cosmos" (327–328). So nature and the universe become "thoroughly demonized" (330).

Jonas sees this as but a step toward modern nihilism and science: while "gnostic man is thrown into an antagonistic, anti-divine, and therefore anti-human nature," modern man is thrown "into an indifferent one" (338), making modern nihilism "infinitely more radical" (339). That is, gnostic dualism, for Jonas, "was at least self-consistent" in positing human being could make a difference in its struggle to realize its own true being in the face of antagonistic nature. Modern science, by contrast, posits "an indifferent nature which nevertheless contains in its midst that to which its own being does make a difference" (339).

Jonas sees the source of the inconsistency in the very same place as Nagel, though the latter approaches this from a far more analytic perspective. An anomalist monist position, I think, would have to go in the same direction. For Jonas, modern nihilism, of which modern western science is a component, has an implicit dualism hidden within it. As Jonas puts it, "The phrase of having been flung into indifferent nature is a remnant from a dualistic metaphysics, to whose use the non-metaphysical standpoint has no right"—in other words, "a teleological nature begotten unteleologically" (339). He ends the essay prophetically, asking "whether a third road is open" that is not gnosticism or modern nihilism—"one by which the dualistic rift can be avoided and yet enough of the dualistic insight saved to uphold the humanity of man—philosophy must find out" (340).

Modern scientists who argue for a nonteleological and purely physical universe might object that they can still find beauty and meaning in their quest for the physical laws of the universe (Dawkins 2011). Consciousness can still be enjoyed even if it is epiphenomenal or an illusion. We can of course still be moral agents without the weight of a teleological agent bearing down on us, simply because it feels right to do so, even to minds whose moral measures evolved by accident (Krebs 2015).

Arguments like these fit into what historian of religion Jeffrey Kripal has called "promissory" materialism, held by scientists who admit they are not quite there yet but promise someday to have a purely physical explanation of consciousness (Kripal 2019, 48). Kripal has offered a consistent counternarrative to these positions and, like Nagel and Jonas, does not think they will ever get there because the science is undergirded by faulty ontology—namely, reductive monism. Like Jonas, he thinks their monism is a by-product of starting with a dualism and simply dropping the mental; it is thus set up on the wrong parameters. Keeping the mind out of the physical, maintaining a purely mindless metaphysics, building a picture of something called a mind-independent reality, has a history. When, where, and why did science first start expelling mental teleology from its midst?

For Kripal, there was a process of mental sciences such as psychology gradually differentiating from the natural sciences, such as physics. Kripal thinks the problem starts with Newton, despite his deep investment in occult powers, but really gets going in the philosophy of David Hume. From that point, "in effect, such thinkers had accepted Descartes's earlier splitting of reality into two separate realms (the mental and the material) but then completely ignored one half of it as unimportant, even nonexistent" (Kripal 2019, 95; see also Damasio 2006).

Kripal thinks that taking seriously peoples' accounts of their paranormal experiences, which he does not think are necessarily supernatural but rather say something about consciousness and subjectivity, should be the starting point for developing a new science of consciousness and getting out of faulty ontology. Kripal then lays out five alternatives to that faulty ontology (pure dualism or reductive physical monism): panpsychism, dual-aspect monism, quantum mind, cosmopsychism, and idealism. In panpsychism matter is alive or conscious "all the way down" (116). Kripal notes that panpsychism, the more politically correct term for the old anthropological concept of animism, is "probably the oldest human philosophy of mind on the planet," since it seems to be the default implicit metaphysic of most indigenous groups (117). Dual-aspect monism is the idea we see in Nagel and other neutral monists like James, and also as we have seen, though Kripal does not mention him, in Davidson. In another book Kripal sums up this position very nicely: "In this model, reality as such is ontologically or fundamentally 'one' but epistemologically or experientially 'two'" (Kripal 2017, 197).

As I read him, basically all the legitimate alternatives to physicalism except the last, idealism, are forms of dual-aspect monism. The theories differ on what lies behind the dual-aspect—that is, what the reality of the one actually is. Some just say it is not mental or physical, some say it is a combination of sorts (like panpsychism), some say it is quantum reality, and some say it is a living cosmos, as in cosmopsychism. Idealists approach similar questions because, like the great Neoplatonists over the ages, they must account for how the material world emerges out of pure nonphysical ideas, exactly the reverse problem of the materialists. Kripal thinks humans can get radical glimpses of the one true reality through experiences that are confusing, paranormal, and can only really be expressed as "paradox, non-duality, poetic allusion, and symbolism" (Kripal 2017, 200). These experiences also often lead to "epiphanies," causing a person to "flip" her thinking patterns—hence the name of his 2019 book.

I think Kripal should be admired for the clarity of his writing on these matters and for his bravery for going against academic orthodoxy. Kripal thinks that in rare moments we can see beyond Kant's categories and, like the classic thinkers in the study of religion such as Rudolph Otto and Mircea Eliade, approach the one numinous reality behind the categories. Though the dual-aspect monism sounds right for the Davidsonians among us, something about this presentation smells fishy. I think this is because for Davidson the monism behind the dual-aspect is not subjective experience but rather *intersubjective* engagement (with objects and events), a point I return to in the final chapter of this book. The immaterial aspect of the world is not some spooky "given" (Sellars, Rorty, and Brandom 1997; Penner 2002) but rather simply the way we describe the one world with ideas, concepts, mental states—in Davidson's terms, semantics. Admittedly, this makes it more difficult to understand the ontogeny of the conceptual dualism—when and where it arises in the universe and individuals—but that does not mean Davidson is wrong. In other words, the picture Kripal suggests seems to be the classic Christian version of mystical experience—I alone in relation to my God, a radically subjective vision. But what if reality is not in the first or third person but the second person? What if reality at its base is radically intersubjective? Consciousness also is often assumed to equate with radically individual subjectivity, but what if consciousness derives from the intersubjective as well? Some versions of the alternative Kripal endorses support this idea. If this point about intersubjectivity being the foundation of the mental is correct, we have to be very careful what we do with subjectivity from a philosophical point of view.

The prioritization of intersubjectivity over subjectivity is embodied in the difference between the idiosyncratic monisms in Davidsonian and Jonas and the more ontologically speculative forms of monism in Nagel and Kripal. But even Jonas provides a theological speculation about a Jewish God that could work from this dual-aspect perspective (Jonas 1987). He presents a myth whereby God creates the universe by becoming nonbeing. God starts the universe in motion without actually knowing how it will turn out; it is a vulnerable adventure. This is a suffering, becoming, caring, not-omnipotent infinite god. But Jonas notes that even an infinite God, for Judaism, must be intelligible in some way. It is not the *Deus absconditus*, but one who leaves behind a revelation, in the "language of men and their times: refracted thus in this limiting medium but not veiled in dark mystery" (9).

For the rabbinic tradition, which is usually understood as the sine qua non for something to be considered part of Judaism, God was partly intelligible through the oral and written Torah. In Kripal's language, God has an idea or a plan. The idea or plan is an oral and written text. This is the only embodiment of God in the world. Even from the very early rabbinic sources, not to mention all of Kabbalah, the first impulse of creation (after "will" or *keter*) is not knowledge, but rather wisdom (חכמה [*ḥokhma*], *sophia*). Unlike the idealist version of wisdom suggested by Plato, in the rabbinic version Torah is concrete textuality, form and matter together existing in the world, whose paradigm is language (Runia 1986; Howland 2011). For the rabbis, the Torah is the one thing that lies behind the dual-aspects; what lies behind are the conversations, teachings, and narratives of Torah. Where Kripal wants to go beyond language to get back to the one, the rabbis say there is nothing more behind this particular language. Similarly, for Davidson, the attempt to reach behind is just another form of scheme-content dualizing (Wheeler 2000; G. Levy 2010).

Jewish Life

Up until this point, I have done a lot of theorizing and said some general things about religion. Presently, I hope to offer some examples of why this matters for studying religion, using Judaism as an example (see Neusner 2003). I want to examine the content of Jewish texts in much the same way Penner looks at the myths about the Buddha. Some of those texts are interesting, beautiful, potentially enlightening structures. In doing so I do not discount the negative, retrograde aspect of some religious (and nonreligious) ideas.

One of the things to keep in mind is that the content of our thoughts, the shape of the information contained, influences the material world. Though much, and perhaps most, of our behavior can be explained with reference to behavior we share with most other living things—such as freeze, flight, or fight responses when we are afraid or efforts to make ourselves more attractive to members of our species we want to care for us—at least some of our actions result from our reasons. Sometimes we think things through and provide reasons beforehand, even if the reasons are not very well thought out, and these can cause us to do things. Religions are full of thought-out reasons for acting in certain ways. For this project alone, it is important to think through the structure of these thoughts, and the semantic fields that makes them possible.

I do not think Judaic myths about the origin of life mean that somehow scholars working on texts one or two thousand years ago had things right all along. I am not providing an apology. Neither do I think these texts are even useful as metaphors. I think they are literally false. That does not mean these texts are worthless for thinking about issues such as life and agency today. The art of fiction is very useful for us. I would even go so far as to say that science is self-consciously premised on fictions. As noted, every scientific theory is a fiction, in the sense that science is pushed along partly by falsifying previous theories.[5]

What I am arguing for is a more expansive view of what Richard Prum recently called “coevolutionary aesthetics in human and biotic artworlds” (Prum 2013). Similar to recent arguments in physics that music lets us access unique aspects of the physical universe (S. Alexander 2016), Prum argues that art, and aesthetics in general, is a feature of the universe. Though he is talking particularly about biological systems, his argument can be expanded to other organized systems. This brings us back to the points we touched on, that from a nonreductive monistic perspective, nonliving systems, living systems, and cultural systems (like language) must all emerge from nature, in Nagel's terminology, or in Davidson's, are radically different ways of describing one single reality. Language, understood in panpsychic terms, is again part of the structure of the universe.

The theories I noted above about life blur the lines between biology, chemistry, and cultural studies. Before the "breakup" of science and religion, this is what scholarship and science looked like. Alchemy, mysticism, astrology, magical arts, and science were all part of the same discipline. After the breakup of church and state, religion came to be understood as a disembodied system of ideas. There was no application of it, no applied science of religion, no religious science. Intellectual motions that began with the Reformation have ended, perhaps rightly, with the mass closing of theology faculties and departments throughout Europe. It is ironic that as soon as other traditions' alternatives to the parochial Christian metaphysics, which guides most science in the west, entered the universities in the form of religious studies, this is precisely the moment many institutions no longer saw the need for theology (or for the humanities in general, which are supposedly "in crisis"). But this is precisely what science needs—interaction with comparative theology (aka religious studies; see G. Levy 2018, 440).[6] There is religious science—it is the study of the weird materialities of religion in the form of texts, myths, and rituals. Of course, this science is going to be somewhat looser than the hard and physical sciences, where consciousness (in Tegmark's terms) is much simpler, less entropic, less chaotic. Humanities are necessary to study the chaos.

As part of this weird science—or one might call it a form of scholarly science fiction—in the following chapters I seek to rehabilitate (as if it needs it) a form of the Talmudic method for present-day scholarship. I have elsewhere, following Wheeler, pointed to affinities between Davidsonian and Talmudic approaches (G. Levy 2010). In both, language is part of the structure of the unfinished universe.

As noted, most scientists who look at religion perform a third-person distance to their subject. This is akin to the way physicists have looked at problems in quantum mechanics, where somehow they think they are in a position to stand outside. More recently, Hugh Everett and others have tried to argue that the quantum principle should apply to the whole universe and everything in it (Everett and Barrett 2012; S. Carroll 2019, 60 minutes in). Similarly, we do not stand outside of religion—religion is not anything in particular but propositions, actions, and ideas—so the Talmudic method still seems apt.

In this chapter, as part of my attempt to give a natural history of religious information, I needed to trace agency back to the origins of life and possibly to a basic state of matter. This is not the same as claiming that matter has agency in the same way that you and I do. Indeed, Tegmark acknowledges that he is looking at the problem "from the outside." If we leave out the inside, this cannot possibly be the whole story. It is a long road from a basic state of matter to the robust forms of agency and consciousness in higher primates. At some point in the story, biological evolution enters the picture. Since evolution moves organisms only to local maxima, there is no reason to think what I am calling "robust forms of agency and consciousness" is ultimately adaptive, since from an evolutionary point of view there is no such thing as something being ultimately adaptive. Fitness depends entirely on context. It may not even be locally adaptive. This proviso is important because it warns us against thinking there is only one road and that all roads lead upward. But we do have agency and consciousness, so at some point in the story something special happens.

From the point of view of the Davidsonian story I have been telling, this is the moment when the primitive forms of triangulation that other animals can do was modified and became the robust triangulation that only humans (and possibly a few other animals) can do. These triangles were the original communal institutions. Davidson thinks some linguistic concepts are necessary for this to take place—namely, the concepts of truth and error, names, predicates, truth-functional connectives, and quantification. These concepts have something to do with keeping track of many relations (Dunbar 2011), of Peircean firstness, secondness, thirdness, and more (Peirce 1865).

Robust triangulation coincides with the emergence of semantic content in communication. As I intimated in the preface to this book, I think it also coincides with the moment human beings started telling stories about the natural information, such as the stars and constellations in the sky, around them. Such stories only make sense in the triangular interaction Davidson describes. These narratives were the first carriers of robust mentalized content. Subsequently, the content could be applied to fellow human creatures.

The stories they told were memorable. They were probably fantastic, they were definitely fictional, they were about human and nonhuman agents. They were likely emotion inducing, both tragic and funny. They were stories about creation. At that moment only, religion as I have defined it becomes possible. In other words, we need stories to have religion. In the final few chapters, I present some examples of these communally instituted, fictional stories of creation—in chapter 4 as they relate to the ancient technologies of oral and written text, in chapter 5 in relation to modern technologies of silver screens, and in chapter 6 with respect to the creation of intimacy.

Notes

Chapter 3

1. This point is similar to Frans De Waal's about interpreting primates (1999, 2009). In stark contrast, Pascal Boyer thinks science should not even anthropomorphize human beings and that doing so "has been the main obstacle to having a proper science of human behavior" (2018, 24).

2. In our evolutionary past, from the moment we started walking bipedally and were adapted to walking long distances, free thinking about animal behavior would become extremely important (Willerslev 2007). Hunting for most of our history probably involved wounding an animal and then tracking it over great distances until it died (Bloch 1992; Carruthers 2002; Sharps et al. 2002; Bailey, Myatt, and Wilson 2013; Lombard and Gärdenfors 2017; Gärdenfors and Lombard 2018).

3. The responses proceed in that order, with "fright," or playing dead, as the last (see Bracha [2004]). First the animal will freeze. If that doesn't work, it tries to run away. If that doesn't work, all it has left to do is fight or play dead. Freeze is about trying to hide, while fright is more about deception and distraction. Note that not just mammals show this response (see Rupia et al. [2016]).

4. There is a lot of opposition to such ideas in the scientific community. See Jerry Coyne's blog for many examples: https://whyevolutionistrue.wordpress.com.

5. This is where we find some of the most important differences between "religion" and "science"; it is the difference between fiction and science fiction. Religions are not so quickly self-critical, though some are deeply ironic.

6. I do not mean to equate the academic disciplines of theology and religious studies but merely to point out that scholars in religious studies are good at comparing theologies to one another. Both theologians and scholars of religion do such comparison, but they usually have different aims.

4 Stories of Creation

> Human language does, in fact, have this almost mystical power. It can describe the infinite particularity of the world as we perceive it. Language doesn't do this through words, giving a unique name to each individual thing. It does it through sentences, through the power to combine words, what linguists call syntax. Syntax is where the magic happens.
>
> —David Adger, *Language Unlimited*

In the various glosses on the concept of Davidsonian triangulation I have mentioned so far, I have emphasized one aspect that I think has been relatively unexplored—that of the relation between teacher and learner in initial triangular interactions. From the anomalous monist perspective, in order for human thought to emerge we have to be shown how to use language. Without this social dimension, whatever innate proclivities we have for language would never grow. What's more, for Davidson, the "teacher" in initial triangular situations is the one who shows the "learner" how her utterances can correspond to the shared world around them.

These utterances do not come by themselves but in narrative packages or stories. Though parents and actual teachers are important, we often learn more of the core narratives—for example, about our family or home—from older siblings and peers who constitute our social environment. Engaging in these stories starts the learner down the road that will give semantic content to her communication, content tied to the particular historical circumstances under which she learned to use those words.

We have seen that Davidson sees social learning in the form of triangulation as something special in human cognition. Indeed, the human capacity for detailed social imitation has at times been seen as the X-factor in human cognition (Heyes 2018, chapter 6; Tomasello and Herrmann 2010). Not just pure mimicry but also the developing ability to project mental states, to mentalize or read intentionality into the world, has been tied closely to specifically human cognition. In previous chapters I argued that this ability has a much broader etiology than previously understood. But whether one sees it as a recent change in human cognition or something that traces back to the origin of cognition, it is clear that much of what we understand as human cognition would simply not be possible without learning—that is, without education. Likewise, the emergence of new institutionalized forms of education involving working with oral and written texts was one of the most important factors in the development of societies over the past three thousand years. The technologies of reading and writing were especially significant in this process (G. Levy 2014; see also Heyes 2018, 19–23, 148–151).

Such social institutions transform religion as well. Whatever innate tendencies, evolutionary endowments, or DNA information programming that provides the background for religion, without the social dimension and indeed the triangular situation between teacher and student, religion would never grow and there would be no content. In previous chapters, I argued that the semantic content of religion is the same as any other content. The content of religion is fictional but just as real and part of the universe as other kinds of content. What was missing from this account is the role that social education—particularly triangulation between teacher, student, and texts—plays in creating that content. In this chapter, I argue that neither science nor religion would be possible without such social generation.

I begin with a focus on ethnomathematics, which leads into a discussion of the speculation on generation found in the ancient scientific text *Sefer Yetzirah*, or *Book of Creation*. This text deals with information, creation, and permutations at the root of space, time, and the mind. I then move on to the topics of narrative, communal singing, and joking, which I think provided the early platform for our species to step from natural information to holistic semantics, though they could never provide a perfect bridge. I conclude the chapter touching on what I call the religion of Joe Rogan.

Mathematics gives us an insightful illustration of a human capacity that is both strongly biological and strongly cultural at once. In the updated version of his groundbreaking book *The Number Sense*, Stanislas Dehaene (2011) notes that all humans and many other animals have a number sense. We can keep track of quanta in quite sophisticated but approximate ways.

This “evolutionarily ancient system” (263) undergoes a number of recognizable changes when humans are brought up in the education systems certain cultures have built up over the last few thousand years. Once we have this education, we are able to conceive of “exact numbers” and eventually the computations of higher mathematics that rely on these concepts. Dehaene emphasizes that this “transition” is not automatic but rather a “cultural invention” involving training that promotes “a conceptual integration of approximate number representations, discrete object representations, and the verbal code” (266).

In the absence of this conceptual integration, the older number sense is apparently far less linear than ours. Dehaene and his colleagues have closely studied the mathematical abilities and concepts of remote indigenous cultures, finding they do just fine with sophisticated approximations. Like all humans and some other nonhuman animals, they are able to “represent quantities as a mental ‘number line,’ a linear space extending continuously from small to larger numbers” (Dehaene 2011, 264). Interestingly, their number line is different from that used by those of us who have had a “western” numerical education; it is curved (Dehaene et al. 2008). Dehaene and colleagues showed the Mundurukù, an indigenous community in the Amazon, “a line segment on a computer screen, with one dot on the left and 10 dots on the right” (264) and found, for example, that when asked to place “5” spatially, they did not place it in the middle of the line, but rather closer to where we would put “3.” Thus, “their entire pattern of response was curved, not linear [figure 4.1]. They seemed to think that 8 is much closer to 9 than 1 is to 2. In fact, their representation was closely approximating a logarithm function, not a line” (Dehaene 2011, 265).[1] The researchers found the same curve associated with uneducated western children; the line begins to straighten, become more linear, with more western education.

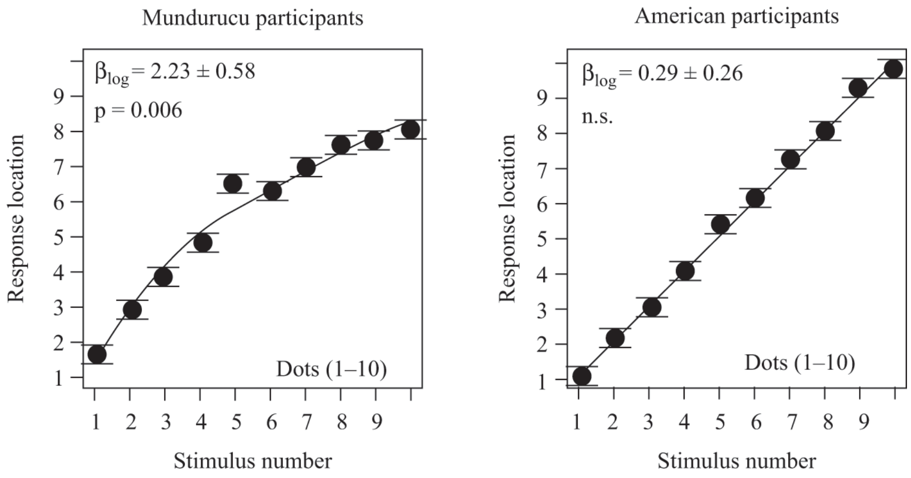

Figure 4.1
Linear versus curving number cognition (originally from Dehaene et al. 2008).

The reason for the curve, Dehaene suggests, is that "the spontaneous representation of approximate number that we and other animals share is mentally compressed. Two large sets, with 8 versus 9 items, seem more similar than two small ones comprising, say, 1 versus 2 items.… Numbers are organized in terms of their ratios: A set of three objects is to one, as nine is to three; hence, number three falls, in a certain sense, 'in the middle' of 1 and 9" (265). This ratio sense is in effect trained out of humans in certain education systems, making way for what Dehaene calls the "successor function," the powerful idea that each integer is separated from the next by the same value, the same distance. This counterintuitive idea, combined with "the verbal code," paves the way for the sophisticated mathematics we can now do (266).

A great deal more can be said about ethnomathematics (Bender and Beller 2020), but for now, I bring these observations up to put forward the suggestion that human mathematical ability is generally a combination of an evolutionarily ancient number sense, language, and specific cultural inventions. Cultures with written language, and especially those with an alphabet, were put on a particular trajectory. There is evidence that the development of written language was connected to economic "counting" (see G. Levy 2014, 151–152). Reading, writing, and arithmetic have been associated since their earliest emergence in the historical record, which makes sense in relation to Dehaene's research, because having discrete written symbols can only help learning discrete number concepts. Early on, this was probably a closely guarded secret of scribes, economic planners, and seal-makers, but it has more recently become relatively democratized. I say “relatively” because there is clearly an unequal distribution of this type of knowledge around the globe. Richer people get better educations.

Two points in particular from Dehaene and colleagues are pertinent to the arguments in this book. First, in order to account for the origin of mathematics, we have to integrate cultural and biological levels, but there will be limits on how far this can be pushed because the relation between the material and the conceptual levels is not linear. Second, information evolves or changes over time.

If the dual-aspect monists from previous chapters, Davidson or Nagel, are right, we have seen there is reason to think that information is part of nature. We also have seen that thinking this way helps to avoid an anthropocentric bias about the various forms of agency, such as nonhuman persons (e.g., animals) and other superhuman agents, central to religion. Some older religious perspectives avoid the bias, but we also see perfectly normal sciences like biosemiotics and cosmology are able to avoid it. As noted, the difference between Davidson and Nagel is that the latter understands the continuity of nature, life, and mind in metaphysical terms, while for Davidson it has more to do with language. We can leave this disagreement open for now.

The Book of Creation

It is in the context of an anomalous monist approach to ethnomathematics that I want to situate the main subject of this chapter, the ancient Middle Eastern text known as *Sefer Yetzirah* (SY). Religion and math have a deep sympathy in the period when this text was composed, probably because it was especially trippy to be discovering connections between new culturally derived mathematical concepts and nature. If mathematician Graham Farmelo is right that the universe speaks in numbers, since math is a combination of a number sense, discrete ordering, and language, we should also say that the universe speaks in natural language (Farmelo 2019).

Though SY possibly existed in some form, either oral or written, before the tenth century, that was when the first commentary on it was written by Saadya Gaon, one of the most important early medieval scholars and president of the Talmudic academy of Sura in Babylonia. Subsequently, many different recensions have been discovered over the years. The most recent translator, Peter Hayman, consulted at least nineteen different recensions in making his critical translation, though he focused on three of these: Ms A in the Vatican, Ms K in Parma, and Ms C in Cambridge (Hayman 2004).

Different recensions probably indicate that there was not really an authoritative version by the time *Sefer Yetzirah* showed up on the desk of Saadya Gaon, a prominent voice within the Jewish world of his day. It was his choice to comment on the text that set it apart as an important text for Jewish and non-Jewish intellectuals in the Middle Ages and beyond. Saadya likely found it interesting because it was a text that spoke in the scientific terms of the day at the same time that it used Judaic concepts. By “scientific,” I mean it was some combination of ideas recognizable from Egypt, from Philo; it was an account of creation echoing, for example, the monologue of Timaeus in the dialogue by that name, but also “Pythagorean” ideas, which saw an alignment between arithmetics and creation.[2] Whatever the origin of such ideas and speculation, they were certainly well in circulation in that part of the world at the time. By “Judaic,” I mean that the deity in the text is no other than “Yah,” a living superhuman agent, referred to with names similar to other “Israelite” texts at the time. Also, no less significant, the language of creation in the text is Hebrew.

Since there is no evidence that the text had a definite form before the tenth century, dating it has been extremely difficult; dates range from the second century BCE until the tenth century CE, immediately before commentaries started being written. Some scholars note a text of a similar name mentioned earlier in the Talmud and related to similar combinatorial speculation, so it is possible that ideas of this type go very far back in rabbinic thinking (Weiss 2019). However, dating of Talmudic texts precisely is nearly impossible, so this does not give us much to go on.

In his commentary, Saadya Gaon notes nine different theories about the origin of the universe. His seventh, eighth, and ninth are the most important for my purposes in this chapter. The seventh echoes Pythagorean theories, or the idea that the cosmos is fundamentally composed of numbers and can be understood as arithmetic and geometric (ben Joseph Al-Fayyumi 1891). The eighth, which Saadya endorses but does not think is the full picture, is the one he sees in SY. The cosmos is fundamentally composed of both numbers and letters; in SY these are ten numerals and the twenty-two letters of the Hebrew alphabet, so a total of thirty-two basic elements. These elements are combined in various ways by Yah/God to create everything, a fundamental idea, such that if a human could study these combinations, she might be able to have similar but far weaker creative powers. The ninth theory, the one Saadya completely endorses, is that the cosmos was created all at once out of nothing, with Torah. According to Raphael Jospe's reading of Saadya, the eighth culminates in the ninth (Jospe 1990).

In its very first sentence, SY names the basic element or elements of creation with the Hebrew root SFR. It says Yah created the universe "with ספר and ספר and ספר." Saadya translated *seferim* into Arabic as אשיא, as "things" (*devarim*). Since ancient Hebrew texts are rarely vocalized (they have no vowels), the root in question has a number of possible meanings. Hayman gives three or four possible options for translating the term. In the first case, *sefer* could mean *letter*. Second, it could mean the "three modes of reality" expressed by the root ספר: *sefer*, *s'far*, *seepoor*. That is, Yah carved out thirty-two paths by means of three types of media: writing, number, and speech (Hayman 2004, 63–64). Third, by the time we reach verse 59, we see that the three things could be the Hook (תלי), possibly referring to a constellation or something in infinite space (עולם); the Celestial Wheel (גלגל) in time (שנה); and the Heart (לב) in living things or humanity (נפש), corresponding to the tripartite division of the alphabet in SY (תלי=עולם לב=נפש שנה=גלגל, see 177). This way of categorizing the alphabet corresponds to three spheres of creativity recognized by SY: infinite space, time, (see §18), and (human) life.

Saadya Gaon addresses the meaning of *sefer*, as do all commentaries. He says the three seferim correspond to the three ways that all things can be recorded (ben Joseph Al-Fayyumi 1891, 42). But there is inconsistency because he also finds that the sages counted four ways: substance, words, writing and thought. For example, he says of the sefer *man*, it can refer to an actual man, saying "man" (the sound), the written form MAN, and the concept *man*. So why does SY only give three? Saadya says it is because the first and last are the same: the "substance" and "thought" are the same (in this case, the actual man and the concept *man*).

Curiously, Saadya therefore concludes that the three seferim for SY are letters, numbers, and language (or speech). This makes sense of his interpretation that the eighth and ninth theories can be integrated, for the Torah can be seen as a combination of all three. This innovation, combining SY with the idea of Torah as blueprint of the universe, is what sets rabbinic thought decisively apart from other cosmogonies at the time, whether Pythagorean, neo-Platonic, *Timaeus*-inspired, or Aristotelian. Saadya combines elements of all these into a rabbinic understanding in which the Torah, a materially embodied text in the world, replaces the demiurge and wisdom as the mediator in creation. Language is built into the universe and into life. In particular Hebrew, and the rabbinic method of interpretation, is a way to observe its structure. For Saadya, SY is thus a text trying to explain how the Torah creates.

Is the universe made of *seferim*? Maybe. As noted, this depends on how we conceptualize numbers, mathematical formulae, calculations, and permutations. For example, the website physics.info has a thorough list of the most commonly used equations and their related constants.[3] These equations and constants are extremely accurate descriptions of events we observe in this universe; different constants would produce different universes. As soon as numbers are discovered, in any culture, it seems likely that people will wonder how it is that the numbers and combinations of numbers are such good descriptors. They will also start to recognize that numbers and equations are not very good at describing language. For that you will need letters and phonemes.

SY takes these observations one step further. Just as one can theoretically count all the integers by using the equation (n + 1), in a similar way, if one combines and permutates these letters or sounds, one theoretically can map all the sentences of the language (Blumenthal 1980).[4] So basically, with letters (or phonemes) and numbers, you can build the whole cosmos—space (תלי=עולם) and time (גלגל=שנה)—and you can also build "artificial" intelligences or minds (לב=נפש) (see Idel 1990, chapter 2, and Zweig 1997). But Saadya also recognizes the problem that even if you have intelligence, something is missing—namely, Torah. I take him to be saying that you cannot have cosmos and intelligence without teaching, without instruction and learning, the most basic meaning of the word *torah*. In order to have generative learning, you have to have learning first.

Invariance in Semantic Spacetime

In the book *Einstein's Jewish Science: Physics at the Intersection of Politics and Religion*, Steven Gimbel examines the figure most associated with the term "Jewish science," Albert Einstein (Gimbel 2012). He explores a few pertinent questions—for example, Is the theory of relativity pregnant with Jewish concepts? To this question he answers resolutely no, for very little of the "intellectual ammunition" Einstein relied on came from Jewish sources. However, Gimbel does think that we nevertheless see a glimpse of a Jewish "style of thinking" in Einstein's work that I would summarize in three ways: (1) its method of truth, (2) its monism, and (3) its attitude to invariance.

First, in terms of Einstein's method of truth, Gimbel sees it not as deduction, which he associates with a Catholic Descartes and Euclid, nor as induction, which he associates with Protestants such as Bacon and Newton. Rather Einstein's method was some mixture of both, perhaps closer to Peirce's abduction, but generally involving a "rabbinic" form of dialogical reasoning that takes a step back from a problem and locates it in a particular context and perspective (86–87). There is truth, but not a singular truth, and God does not have a monopoly on it. Truth is not simply a pregiven feature of the world, but instead, of sentences uttered in dialogical opposition and in a specific context.

Second, there is only one world, but it exhibits radically different properties depending on how we look at it. This point comes out most clearly in Einstein's 1905 paper "On a Heuristic Viewpoint concerning the Production and Transformation of Light," in which he postulated the paradoxical nature of light, where sometimes it acts as if it is a wave and sometimes as if it is made up of particles (Einstein 1905). According to Gimbel, light does not really act in either way, but the behavior is dependent on the context in which we ask the question.

Gimbel intimates a third characteristic that concerns the notions of covariance and invariance. Einstein did not call his theory by the name we know it today: relativity theory. This was a name given by Max Planck. Rather, Einstein called it "invariant theory." Einstein's genius was to reshuffle the Cartesian/Newtonian deck with regard to covariant and invariant descriptions of nature. Part of this entailed recognizing the role that language plays in deciding which features of nature are covariant and which are invariant.

To illustrate this point, Gimbel gives the example of Mount Rushmore, the rock sculpture busts of four US presidents in the state of South Dakota (see figure 4.2). If we ask with regard to the sculpture whether Abraham Lincoln is to the right or left of George Washington, the answer depends on whether we are in front of or behind the sculpture, whereas Thomas Jefferson's position is invariant with regard to where we stand because it is in between them (87). The concepts of covariance and invariance thus concern both our positionality and the embeddedness of language in nature. Einstein recognized this when conceptualizing far more radical ideas such as what our experience would be like if we could approach the speed of light. Einstein drew his most profound conclusions purely with thought experiments, though of course he was up to date on the latest scientific discoveries and was extremely good at math. (It is fake news that he wasn't.)

Figure 4.2
The Mount Rushmore monument as seen from the viewing plaza.

Philosopher Samuel Wheeler has called Davidson's anomalous monism a "rabbinic philosophy of language," so it is a Jewish-style of thinking, even though Davidson was not Jewish (Wheeler 2000, chapter 7). As noted in previous chapters, Davidson's (and Quine's) notion of language entails the idea that no sense can be made of the dualism between scheme and content with regard to language; in other words, language is not a scheme for making sense or organizing the world. In the language of this chapter, different sets can describe what goes on in the world; they are covariant. What is invariant is the basic core "grammar" (for lack of a better word) that all languages share: notions such as truth, falsity, temporal markers, part of speech, and the like. Without some core of agreement grounded in this semantic-syntactical "grammar," no sense could be made of disagreement and falsity, and thus no content would be possible. If we give up scheme-content dualism, in addition to the three other so-called dogmas of empiricism, we see that, in a similar sense as Einstein's theory, language is built into the universe. More precisely, propositions are shapes that are embedded in the universe. Humans make those shapes through our verbal and bodily utterings and mutterings. We cannot pull ourselves out of those shapes and see this dimension of language; rather, we see it only in glimpses, much as Einstein and Hermann Minkowski did with respect to space-time.

For Einstein, in other words, the problem with Descartes and Newton was not about science, but rather about interpretation and translation. The concepts previously thought to be invariant (e.g., distances, durations, and masses) became covariant, and a new context for invariance was devised—namely, a unified picture of space and time, space-time, which could only be grasped by the human mind allegorically or through mathematics. To put it simply, “Jewish-style” reasoning is heuristic and playful, less top-down, with language engrained into nature. There is truth, but it is less about absolutes and more about seeing the relation between invariance and covariance; furthermore, it is impossible for an individual human being alone to glimpse.[5]

Genesis

The Hook in Space—תלי בעולם

Despite naïve physicalism in the natural sciences today, the philosophical questions that underlie the various “theories” that Saadya presented in the tenth century are alive and well. Disciplines such as the cognitive science of religion and much evolutionary psychology, despite the valuable work they do, often make claims that human cognition is best explained by examining our so-called environment of evolutionary adaptedness (EEA). The term conveys not a specific place or time, but rather the general environment of selection pressures under which our ancestors lived for a broad period of time, basically corresponding to the Pleistocene. This environment was what gave rise to specific hominid adaptations (Tooby and Cosmides 1990, 386–388).

I have argued that it is myopic to focus exclusively on the hominid EEA when trying to account for something like religion. One could say SY makes the same point. Most of our cognition, even our most basic concepts (seferim), quite possibly go back to the beginning of the cosmos. From a Davidsonian perspective, as we saw in chapter 3, the beginning of the cosmos might mean when we first formed propositions. Does it make sense to say this beginning occurred all at once, in a kind of semantic big bang, or can it be traced back even further? That particular project Davidson was loath to do, but we can still try.

According to the genealogy worked out in the last chapter, we saw that it makes sense to think of communication in the context of a continuum of information. The continuum stretches from information in inanimate things, which is described by principles of thermodynamics, to animal information, where information is described by both thermo- and evolutionary dynamics. Animal information coincides with a primitive version of Davidsonian triangulation based in primordial behavioral primes that derive from agency. Emerging from this genesis, our first human ancestors, wayfinding using permanent fixtures in heaven and on earth, kept track of other animals' migration patterns, along with a host of other rhythms in the natural world over which they had no control. They communally composed narrative oral texts, probably musical in nature, memorializing this natural information. Once in place, the narratives were there to triangulate with. The bedrock of true shared beliefs that make natural semantics possible was there in these collective narratives before it was instantiated in any particular belief.

At that point, primitive triangulation makes way for the primitive semantics elucidated by Anna Wierzbecka and colleagues, and Davidson's four necessary linguistic concepts enter the picture (concept of truth, names and predicates, truth-functional connectives, and quantification). These new concepts allow for the decoupling of an individual's beliefs from the collective and thus for the emergence of robust triangulation. Now the idea of particular beliefs becomes possible. Truth was important for establishing the holistic bedrock of intersubjectively shared beliefs, but falsity was the key to differentiating individual beliefs from that collective.

Any particular belief in that shared bedrock may turn out to be false. Cracking through it is difficult. It is only at this moment that we can be truly surprised, in Davidson's sense, meaning a prior attitude has friction with a given situation. It is for this reason the role of the teacher is essential—not just for showing the truth, but rather for surprising the student by lifting off some of the bedrock's weight and training away the tendency to accept tradition's given truths. Once these elements are there, individualized propositional attitudes start to take more concrete shape. For some reason, at least since the last ice age, it is in the long axial period in the first millennium BCE that all over the world classes of people start to engage in this task of questioning. Most of the systems we designate as the classical religions get their start at this time, along with systematic education in science and mathematics. It is likely that, for better or worse, as Dehaene and colleagues showed, in the context of this process, minds become less logarithmic and more linear.

The Celestial Wheel in Time—גלגל בשנה

As we saw in the previous chapter, at root there must be some organizing principles that are simply postulated by natural cosmological science. The physicist Sean Carroll thinks one candidate could be the second law of thermodynamics, which accounts for the "arrow of time" and what he calls the "Past Hypothesis": "[The reason why] the entropy of the universe was lower yesterday was because it was even lower the day before that. And this logic stretches all the way back to the origin of the universe" (S. Carroll 2010, 378).

Why is the universe like this, with an arrow of time, a past and future? Carroll says modern cosmology should be able to explain this, not just posit it. As it stands presently, he gives two answers: either we just do posit it, meaning the explanation "comes down to an assertion that the early universe simply is that way" (378), or we have to go back further and recognize that the big bang was not the beginning of the universe but that the universe is eternal. This is equally difficult for us to conceptualize, but we are not given other options. My point is that positing this background condition about the second law and the arrow of time tells us that there is a conceptual outside, a kind of surprising cosmological version of Gödel's incompleteness theorem, even in a purely physicalist explanation. In the conditions of set theory, the set—of cosmological order and disorder in this case—cannot contain itself (Zweig 1997; S. Morris 2018).

The Heart in Life—לב בנפש

The epistemological innovation in SY, surely inspired by cosmogonic texts such as Plato's *Timaeus*, was that letters and numbers were the building blocks of the cosmos. Saadya thought this was almost right but that what was missing was that these letters and numbers had a form, and this form was Torah. Over the course of the next few hundred years another doctrine began to emerge based on this position. The idea, which came to be branded as Kabbalah, was that the Torah was a code that mapped how the universe and everything in it came to be.

The code was universal and recursive, much in the way the linguist David Adger describes the simple innovation that allows for all human language, what he calls the "principle of self-similarity" (Adger 2019,

209) as a gloss on Chomsky's concept of Merge. The fractal quality of this organization occurs throughout nature: "when life or matter is organized in a hierarchical way, we see smaller structures echoing the shape of the larger ones that contain them" (3). It is not evolution but nature that is responsible for language: "From slime mould to mountain ranges, from narwhale tusks to the spiraling of galaxies, Nature employs the same principle: larger shapes echo the structure of what they contain.… Human language is also organized in this way" (3).

While Adger is interested in understanding syntax, the Kabbalists were more interested in semantics. They explained the ongoing creation of the universe and everything in it as the coming into being of aspects of personality, using a term derived from the fundamental information building block (SFR/ ספר) in *Sefer Yetzirah*: SeFiRot. Traditionally there are ten or eleven sefirot, depending how we count them, with "male" and "female" characteristics: Keter (crown, will); Ḥokhmah (wisdom, beginning); Binah (understanding or intelligence, womb) Da'at (knowledge; sometimes placed fourth); Ḥesed (love); Gevurah (judgment or power); Tif'eret (beauty or compassion); Netsaḥ (eternity or endurance); Hod (splendor); Yesod (foundation or righteousness); and Malkhut (divine presence or community) (see figure 4.3). The sefirot have a structure, which architectonically maps cosmos, divinity, and humanity all at once.

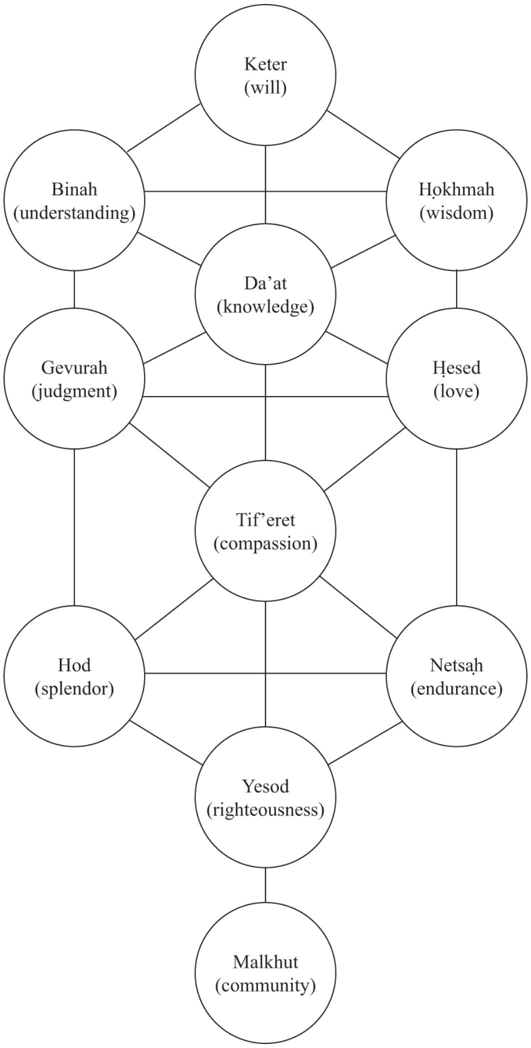

Figure 4.3
Sefirot.

In order to build a cosmos or an *anthropos*, concepts have to be present from the very start. We may call these primitive concepts. The Kabbalists came up with different concepts from those we saw from modern linguists looking into primitive semantics, but the idea that complex concepts have to be built out of building blocks of simpler ones is the same (Goddard, Wierzbicka, and Fabréga 2014). Taking a close look at these Kabbalistic concepts, it would be hard to imagine a form of manufactured (i.e., artificial) intelligence that did not also have them. This is partly why Kabbalists entertained myths that they could build such machines, the most famous of which is the *golem* (Idel 1990). In terms of the history of our species and the development of individuals (phylogenetic and ontogenetic), we must ask when concepts like these emerged. It is more of a stretch to think like the Kabbalists, that God (in some sense), human beings, and the universe are all built out of these concepts fractally repeated, but if Nagel is right, surely some nontheistic version of this idea must be correct.

Heptapods and Tralfamadorians

In episode 1159 of the podcast *The Joe Rogan Experience*, the host talks with Neil deGrasse Tyson, director of the Hayden Planetarium. They get onto the topic of the film *Arrival* (2016), based on the novella *Story of Your Life* by Ted Chiang (2016), author of the story about Hillalum and Babel mentioned in the introduction of this book. The plot of *Arrival* revolves around an alien visitation. The aliens seem to be trying to communicate with humans, but they are unable to understand. The main character and narrator, Dr. Louise Banks, is a linguist who eventually manages to comprehend them. Tyson disses the movie, claiming that if he could send scientists to talk to the aliens, he would rather send an astrobiologist and a cryptographer.

If Tyson were a humanist, he might have read the novella instead of, or in addition to, watching the film. The novella makes it clear why a linguist is necessary in this situation. It turns out that the aliens' language and physics are connected and teleological. The analogy in physics that the linguist uses to make her breakthrough is Fermat's principle of least time, that a beam of light moving from one point to another will always travel the path that takes the least time. This is true even when it moves through different media (like water). The beam seems to "know" the best path right when it starts off on its travels. Much like the Tralfamadorians in Kurt Vonnegut's *Slaughterhouse Five* (1969), who see all of time as a finished landscape, the alien language in Chiang's story is similarly teleological, where thoughts are given as a whole and word order does not matter. As Banks puts it, "The physical universe was a language with a perfectly ambiguous grammar. Every physical event was an utterance that could be parsed in two entirely different ways, one causal and the other teleological, both valid, neither one disqualifiable no matter how much context was available" (Chiang 2016, 133).

As Banks comes to learn more of the alien language, which actually is two different languages (Heptapod A and B), one spoken and one written, she comes to think differently about time. She seems to experience time as one invariant moment, one big sentence or thought in the alien language in which she can see the past and future. As Banks puts it, "Occasionally I have glimpses when Heptapod B truly reigns, and I experience past and future all at once; my consciousness becomes a half-century-long ember burning outside time. I perceive—during those glimpses—that entire epoch as a simultaneity" (141). Much as her daughter wants to hear the proper version of the story of Goldilocks from beginning to end even though she knows how it will go, or how we know how a performative ritual will go before starting, these aliens still act even though they know how things will go: "They act to create the future, to enact chronology" (137). I read these aliens as anomalous monists who have studied *Sefer Yetzirah*. From this perspective, the story makes sense because we already "parse" utterances in two entirely different ways, in terms of physical causes and in terms of teleological mental states. As in *Sefer Yetzirah*, information and language are embedded in space, time, and life.

The question concerning the relation between the language one speaks (or reads) and thought has been central in philosophy. The most radical answer, one brought up in the film *Arrival* but not the novella *Story of Your Life*, is known as the "Sapir-Whorf hypothesis." Though this term does not accurately reflect the views of Sapir or Whorf (and neither of them coined it), it serves as a stand-in for the idea of linguistic relativism (Scholz, Pelletier, and Pullum 2016). This is the idea that two agents—whether animal, alien, or superhuman—who speak incommensurable languages must have such different thought processes that they experience the world as radically different from one another. There can be stronger and weaker versions of this relativism concerning how much our languages affect our thoughts and experiences. In the case of *Arrival*, learning the alien language affects Banks's thoughts and experiences in radical ways. She begins to think like the aliens.[6]

As we have seen in previous chapters, taking an anomalist monist stance precludes the idea that there could be radically incommensurable languages. There are at least two reasons for this. The first is that a language by definition is translatable. If some sounds or visual gestures are impossible to translate into my language, I have no basis for saying that those sounds or visual gestures are language. Part of what constitutes language is its translatability. The second reason comes from our giving up of scheme-content dualisms. Language does not organize experience in the sense of a scheme organizing some previously unorganized content. Our allied theorists, Nagel and Kripal (chapter 3), may entertain the idea that the neutral thing beyond our dualism is precisely this unorganized thing that language comes in and organizes. From a monist perspective that gives up the four dogmas of empiricism, most notably the idea of the "given," this position cannot hold. Whatever the neutral thing (the monism of anomalous monism) beyond dualism is, it is not an organizing scheme, nor is it unorganized content, though perhaps somehow it is a mixture of both. Davidson discusses this point most forcefully in his essay "The Myth of the Subjective" (Davidson 2001b, chapter 3).

As noted in the previous chapter, animals are the original aliens. In her chapter entitled "On Reading Signs: Some Differences between Us and the Others" in the book *Evolution of Communication Systems*, the philosopher Ruth Millikan tries to understand the cognitive differences between humans and other animals (Millikan 2004). She concludes that one of the most characteristic differences is that "we [humans] appear to be compulsive collectors of all kinds of junk" (28). I regard most religion—and with regard to this chapter, the rabbinic conception of Torah as embodied in the Talmud—as a classic example of such meaningful "junk." This "general disposition to collect junk," Millikan thinks, does have some use. It is a necessary by-product of our propensity to "play games in our minds[,] … tinkering with the collected junk to see what might be built out of it that would be useful or help fulfill otherwise empty dreams" (28). Such dreams are sometimes, by luck, fulfilled, and this is where Millikan thinks their evolutionary explanation lies.

Taking a few steps back in her argument, we find that Millikan thinks human communication, though similar in almost every respect to communication in other animals, is especially different in the way that learning takes place; in particular, what differentiates human learning routines is that our "representations" can be "open-ended" (23), meaning not dictated by innate and specific programming, nor "learned according to built-in triggers" (22). While mammals in general exhibit fluidity in this respect, reflected in the fact that mammals tend to play more than other animals, human mammals seem particularly invested in play, specifically linguistic and mental play. As the fictional William of Baskerville claims in his quest to find Aristotle's lost book on comedy, this type of play explains the fact that humans are probably the only animal we know that can laugh at a joke (Eco 2014, 211, 527). Humor is perhaps the most human thing.

As it applies to the questions of this chapter, of course, religion—and rabbinic Judaism, which I have taken as an exemplar—can be understood as quite serious. Fear, as opposed to humor, is an important part of education. When we are afraid, life becomes more salient, and amygdally dependent animals like us freeze, flee, or fight (usually in that order); if that does not work, we "play dead." In humans, the order also depends on personality (Bracha 2004; Rupia et al. 2016). The fear can be used to induce specific and probably very ancient routines in humans. Fear is indeed a core motivator in traditional education systems, like the one built around Torah. "You shall fear your god" is repeated seven times in the Hebrew Bible (Lev. 19:14, 19:32, 25:17; Deut. 6:13, 10:20; 2 Kings 17:36, 17:39).

Humor and Memory

The production of the Torah should be situated in the historical context of other developments happening globally in the first millennium BCE, a period when the core institutions of most of the major world religions formed, sometimes called the Axial Age. The term has been controversial as a description of this period because it makes it seem as if some radical transformations took place quickly, when instead most of the changes seen in this period were gradual and are still with us (Bellah 2005, 2011). The term also has a tinge of Eurocentrism because it is often assumed that Europe is the main heir to those developments.

This is not true. For example, alphabetic literacy, which was invented in Western Asia following thousands of years of development (see G. Levy 2014), spread throughout Asia and Africa. Written language continues to develop or possibly evolve into the present day. Whether in alphabetic or other forms of literacy, one trend that really got going about 3,000 years ago is education systems—that is, *school*. These systems were usually reserved for the wealthy or kept controlled as technologies for specific guilds (scribes, priests, and monks of various sorts). Nevertheless, this is the period when education began to be systematized and technologized, the period when human beings started reflecting on the best ways to learn. During this period, human beings, as far as we know, started thinking about thinking; but far more importantly, we started learning about learning.

One way to learn is by rote memorization. In contrast, some education systems used dialogical performance as a good way to learn—for example, in the Platonic Academy. Other systems found that creating interesting narratives was the best way to learn. Games were recruited for all these purposes. As education systems became more adept, and especially now, teachers have come to realize that play, fun, and humor make a far better platform than fear for education.

Though humans appear to be the only species that make jokes, there are deeper continuities with other species. In the same book as Millikan's essay, Robin Dunbar argues that laughter emerged as a form of social grooming in human beings (Dunbar 2004, 271). Dunbar is famously known for his social explanation of language. That is, language emerged in sync with the growing size of human groups, replacing grooming in primates. Our primate relatives tend to have smaller trust networks. Dunbar has argued that our cognitive power and the size of our neocortex grew together in order to keep track of more numerous intimate relationships (259). It thus enabled human clans to grow such that most of us have a maximal intimate network of about 150 people.

Dunbar finds that laughter was important in this story because it is one of the main means by which we bond with one another socially in the absence of physical grooming. The increased cognitive ability is not so much about memory, he says, but mapping relations—that is, "the manipulation of the animal's knowledge about the state of a given (dyadic, perhaps even triadic) relationship, and how this is updated in light of the continuous flow of information about social events that an animal receives" (259). Language is more efficient because we can speak to (i.e., "groom") one another while doing other things, with multiple people at once, and relay information about nonvisible social events and people (i.e., gossip) (261).

Dunbar thinks musical chorusing and communal singing were intermediate steps between nonhuman animal vocalization and human speech (261–262). The bridging of the gap, he argues, did not take place all at once but was probably gradual and should be seen as "the culmination of a process of increasing diversification of social bonding mechanisms based on natural forms of communication" (263). In the next phase he thinks laughter is a better candidate than smiling as an elicitor of prosocial endogenous endocrines (mostly naturally produced opioids and oxytocin), because whereas smiling in our closest primate cousins mostly signals fear, laughter is morphologically related to “the facial expressions given by chimpanzees during play (‘round open-mouthed face, or ROM’)” (264).

But joking in humans came to rely increasingly on our special social cognitive capacities. Dunbar argues, “Jokes commonly depend on creating surprise either by the outcome or through a play on words (by exploiting our ability to comprehend metaphor or double meanings)” (269). We saw in chapter 3 that for Davidson surprise is essential for attributing propositional content to rational creatures, and that for Friston it may also be central to the economy of free energy in any self-organizing system. For Davidson, only animals that can be truly surprised should be considered candidates for semantic thought. So Davidson the anomalous monist philosopher, Friston the neuroscientist, and Dunbar the evolutionary psychologist all point to surprise as a key to human cognition.

Humans, as noted, seem particularly good at recursion, at embedding cognitive chunks within other chunks. This same ability applies to intentionality. Dunbar notes that joking often involves multiple layers of such recursion. Each new embedding can be thought of as one “order” of intentionality. Dunbar and his colleagues have found this ability relates to his arguments about the size of human groups—basically our ability to keep track of social relations—but it also relates to our ability to tell good jokes. Thus, “whereas chimpanzees can, at best, only aspire to second-order intentionality, humans can habitually cope with fourth-order intentionality” (269). He thinks two orders would be plenty for “parsing speech and comprehending the factual meaning of utterances,” so the additional two orders must have something to do with “understanding metaphor and hidden meaning” (270).

Indeed, these extra recursions, apart from telling jokes, perhaps more importantly help embed jokes in larger chunks—namely, narratives. It is likely that entertaining narratives, both in the form of gossip about members of one’s community, including members who no longer exist, and gossip about “fictional” agents we have relations to, such as superhuman agents, were the main vehicle for the new forms of grooming that Dunbar speaks about. These “myths,” perhaps in musical or at least rhythmic form, were precursors to human language as we know it and likely followed the period of communal singing Dunbar notes.

The Religion of Joe Rogan

If information is part of nature, so is comedy. At its core, the human relation to nature is comic. The human predicament in nature leads us to conventional thinking, while comedy provides a platform to cut through these conventions, to see the “true” nature of things. Humor emerges in incongruencies where we notice certain truths and falsities. These truths and falsities are entertaining in part because they are surprising.

The communal singing that once provided the platform for thought and language now occurs mostly on the Internet. My fifteen-year-old son even argues that the school education system is outdated because of it. At the present time in the early 2020s, we have had the Internet for a number of years now. Mine was the last generation born before the birth of the Internet. I went to college in the 1990s at Dartmouth in New Hampshire, which was one of the first nongovernmental institutions to “plug in.” In the beginning, we mostly used it for email, even though the term “email” did not exist at the time. Ever so gradually, the Internet got bigger and more useful. Presently, one of the most common uses for it is listening to podcasts and audiobooks. It is easier to listen than to read written texts. This provides the context for one of the most popular media personalities, Joe Rogan.

As Devin Gordon, writing for *The Atlantic*, points out, Joe Rogan is immensely popular, but mostly among men (Gordon 2019). Donald Trump even tweeted that he wanted Rogan to host a presidential debate between him and Joe Biden (8:43 a.m. EST, September 14, 2020). Playing off the immense, religious-like appeal of Oprah (Lofton 2011), Rogan is referred to as the Oprah for men, or “Broprah” (see hashtag #Broprah). Gordon thinks he fills a gap as a relatively good role model for men in a time when masculinity is under pressure. Though he focuses on the USA, speaking from personal experience I can say many men all over the world regularly listen to and watch the Rogan show. There has not been a sociological study of this phenomenon yet, but there surely will be. One productive way is to understand Rogan as an unlikely teacher, guru, or role model.

The Joe Rogan Experience show, recently purchased by Spotify, has helped launch a number of online careers. Those include hard-nosed scientists like Sam Harris and firebrands like Jordan Peterson and Gad Saad, but also comedians like Duncan Trussell. In episode 317 of Trussell's podcast, *The Duncan Trussell Family Hour*, Tony Hinchcliffe, another comedian who got his start through Rogan, discusses with Trussell the recent explosion in the popularity of stand-up comedy. Trussell goes on a long riff playing with the idea that the Comedy Store in Los Angeles is something like a religious temple. In this temple, there is an initiatory system to become a performer. The induced laughter, which as Hinchcliffe says is the sound we make when we are "childishly surprised," is like religious chanting; it even sounds similar. Trussell says the comedian is like a shaman who "channels honesty," and just that is enough to make a wounded person walk out and say, "It's OK to be human." The two then get to a discussion of Rogan, "one of the lead warlocks at the temple." They both regard him as a master who teaches them to open their eyes wider. But just as the Comedy Store does not know it is a temple, Rogan does not know he is a "mystical teacher" (Hinchcliffe 2018).

While all "honesty" probably involves a great deal of dishonesty, we can say stand-up comedy is the performance of a particular type of surprising honesty. The theme of honesty runs through Roganworld in a number of ways: in terms of (1) psychedelic drugs, (2) mixed martial arts, and (3) speech.

The first connection to honesty concerns psychedelia. The narrative is that when one does psychedelic drugs one is opened up to parts of one's mind that were previously more controlled. Under the influence of the drug we have less control over our thoughts, which makes them potentially dangerous for individuals who already have trouble controlling their thoughts, such as people who suffer from schizophrenia. Paradoxically, this can also be dangerous to people who are *overly* controlling about their thoughts, who often live in strong forms of denial.

A good example of someone overly controlling is Richard Dawkins. In *The Joe Rogan Experience* episode 1366, in a conversation that centered on religion, Rogan broaches the question of psychedelics with the famous skeptic. Dawkins admits he has never tried them. He goes on to say, "I've been offered to be accompanied on the trip by a very nice woman friend and I’ve never so far dared take her up on it.” When Rogan asks why, Dawkins answers that it is because he is afraid of having a bad trip:

> I asked advice of a cousin of my father, who just recently died who was a major expert on psychedelics, and I think he was the one who introduced Aldous Huxley to mescaline, for example, and he judiciously advised against. He said the horrors of a bad trip were so awful that he wouldn’t advise somebody to go into it. My friend who’s offering me this trip says it would be a relatively low dose and she would take another low dose so she could kind of accompany me and stop me jumping out a window or anything. (Dawkins 2019, 15:56–16:53)

Since we all are somewhere on the overly controlling spectrum, there is the potential for anyone to have a bad trip, and some a horrible trip. A horrible trip, as Rogan says, is when one tries to control the drug rather than letting the drug control you and accepting what it shows you. Some of the things you see might be paranoid fantasy and illusion. But as Rogan says, he likes to be paranoid. He sees it as a mental exercise, a way to challenge his mind and grow from it. Some of the paranoia is real, and one must look at it. So it is not that psychedelic drugs take us to a whole other reality. The point is that there is one reality, but we do not want to see it. This is the first sense: psychedelic honesty, in Roganworld. The problems of rationality such as weakness of the will and compartmentalization of the mind that we saw in previous chapters as so central to religion—these rigidified patterns of thinking and acting—get loosened up by psychotropic chemicals (Smail 2007) acting on our bodies and our brains.

The second form of honesty is physical. Mixed martial arts is exemplary of the idea that there are physical differences between organisms in nature. Unlike aesthetic martial arts, which are more like choreographed dancing, mixed martial arts is just what the name says: a combination of all the known forms of hand-to-hand fighting. There are almost no rules in mixed martial arts, though there definitely are some, such as no attacking the genital or eye areas, and there are special rules when the opponent is already on the ground. In this way, it is right to describe it as the “purest” professional form of fighting; the closest to a street fight (Howley 2014). As Rogan repeatedly emphasizes, one of the ways to make this form of fighting even more honest is with weight classes. This is because even a bad heavyweight fighter would most likely have little trouble beating a much better (in terms of pure skill) lightweight fighter. These physical differences make a lot of difference. The point is that in contrast to rigidified institutional patterns and structures that are abstract and disembodied, this form of fighting is physically honest. The better fighter usually wins, even though anything can happen in a particular fight. The only advantages are meant to be in skill, strength, and preparation. Some of this ideology we already saw present in the book and film *Fight Club* (Palahniuk 1996).

The third form of honesty involves speech. There has been some debate about whether stand-up comedy is about the truth. For example, Jerry Seinfeld claims it is not, not about "real life" (Amira 2018). Rogan, by contrast, thinks it is. But even the observational style that Seinfeld made so famous relies on noticing incredibly mundane things; his comedy transforms these mundane experiences into something surprising and thus funny. Part of the idea behind the comedy in Roganworld is its libertarian stance toward free speech; it does not tolerate any form of censorship. The more than a thousand interviews done on *The Joe Rogan Experience* are part of an effort to get to the truth. One gets to the truth through conversation with smart people. Though Rogan leaves much of this truth up to the people listening, there are some metaphysical postulates that emerge from the long discussion.

Apart from the comedy, there is an implicit monist metaphysics in Roganworld that is sometimes made explicit. For Rogan, everything is natural; there is a mind-body connection, but thoughts are also real. In this sense, the metaphysics looks close to Nagel or even Davidson. One of the narratives he returns to over and over is the idea that human beings are a kind of technological butterfly who will usher in something like Ray Kurzweil's singularity. For Rogan, technology should be understood as a perfectly natural outcome of the universe. Despite the close interrelation between mind and body, Rogan's discourse rarely if ever reduces mental to material. He is not a reductionist in that sense, possibly something he learned as a result of his many psychedelic experiences.

Rogan notoriously played a conspiracy theorist on the fictional sitcom *News Radio* (NBC USA, 1995–1999). Similarly, *The Joe Rogan Experience* is an outlet for all sorts of wild speculation and conspiracy thinking. But this is also balanced by skeptical thinking and a wide variety of popular science discussions. Rogan's tendency is to entertain almost any idea that guests on his show express, but his own opinion is usually evidence based. He has a great deal of respect for the scientific method and defers to scientific experts when conversation gets beyond his capacities.

As far as religion is concerned, Rogan is an atheist, or more accurately an agnostic. He seems quite skeptical of all institutional forms of religion, though he is adamant that there are things we do not know and is clearly open to the idea that psychedelic experiences represent a kind of window to reality that most people cannot see while sober. Generally, however, religious ideas on the show are not taken seriously, and religion is regarded as a ruse for some people to gain advantage over others.

I began this chapter emphasizing the necessity of triangular learning between teachers and students for Davidson's notion of semantics to carry content. I described how education in mathematics changes the way we conceive of the relations between number concepts. Human cognition is a deep historical adventure involving the interaction of a living biological code with the routinized and rhythmic patterns of human culture through space and over time, along with our interaction with immaterial ideas and concepts, some of which we invent and some of which we discover about the universe. The communally instituted myths that formed the bedrock of meaning-making get radically resituated once humans begin to systematically educate and thus alter our own cognition. We start to discover and manipulate the building blocks that shape mind and cosmos, and we vie over the power that comes with it in the form of a mental arms race. This was the reason that rather than letting Aristotle's treatise on comedy get into William of Baskerville's hands, the monk Jorge in Eco's *The Name of the Rose* commits suicide by eating a poison-laced copy of the book. He does so because he believes comedy poses a challenge to his religion. In such a way comedy seems always to represent an antidote to rigidified structures in mind and cosmos.

To summarize the takeaways of this wide-ranging chapter, I have argued that if Davidson is right, language and thought (in his sense) break us free from determinism. Meaning in language does not derive simply from teleological goals but rather from improvised triangular interaction. Anomalous monism upholds the paradox that physical descriptions of nature are law-bound (nomalous), while mental descriptions of nature are anomalous. The physical sciences tell teleological stories about causes and functions, whereas minds are not predictable or determinate, even though they show regularities that make them predictably irrational (Ariely 2008). Narratives, too, are teleological: the story of your life has a beginning, a middle and an end; it has an arrow of time.

Phenomena, like humor, that have surprise at their root (Kant 1951, I, I, §54)—and if Davidson is right, thoughts in general—hold apart from the physical in their global supervenience, despite every mental event being identical to some physical event. In the context of the deeply shared evolutionary background of our species, the content of thought emerges only through education into a human community. Such education builds different shapes—curves and lines—of thought. The narratives provide the base that we break out of in moments of surprise, creating our own personal identity. A very ancient theological question taken up in texts such as *Sefer Yetzirah* has been how one can have freedom in a law-bound universe. Davidson's answer, like Carroll's, is that we just do; we have to if we want to see the thoughts of others independent from our own.

Ironically, Roganworld has many aspects similar to religion. Though women are part of the fanbase, I think it is fair to say that this is a religion for people who identify as men, or perhaps more accurately a religion of a certain type of masculinity. There are repeated myths and encouraged practices—all given with the wink of a comic, a kind of Zen move that says in the end the core of things is ultimately absurd and comical. Rogan is an example of a teacher who mediates communally instituted myths in a creative, comic mode. If Joe Rogan is a warlock in a comedy temple in Hollywood, the broader religious media landscape is the subject of the next chapter.

Notes

1. Dehaene is referring to the fact that "their number lines spontaneously match a compressive logarithmic law" developed by the Scottish mathematician John Napier in the sixteenth century (265).

2. "All the major early commentaries on *Sefer Yetzirah* treat it as a scientific work" (P. Alexander 2014, 31n15). See also Jospe (1990).

3. See https://physics.info/equations/ and https://physics.info/constants/.

4. This is the "brute force" method by which some AI language algorithms work, such as Open AI. This point also resembles Davidson's application of Alfred Tarski's truth theory to semantics (see Glüer 2011, chapter 2).

5. Gimbel thinks some Jews, such as Durkheim, exhibit a similar "style of thinking," and some, like Freud, do not. Furthermore, this style of thinking is not unique to Jews. Mel Alexenberg (2006) makes a similar point with regard to architectural space.

6. I discussed the subject of communicating with aliens in relation to Davidson's principle of charity in G. Levy (2012).

5 Bright Light, New Religion

> τί θεός; τὸ κρατοῦν;
> τί βασιλεύς; ἰσόθεος
> What is a god? That which has power
> What is a king? Equal to a god
> —Anonymous second-century CE catechetical text from Egypt, Pap. Heidelberg. Inv. 1716, in Albert Rehm, *Philologus*

> There is only one truth. Whoever controls your eyeballs runs the world.
> —Don DeLillo, *Underworld*

> Once again, Jim felt reality blurring into fiction.
> —Jim Carrey and Dana Vachon, *Memoirs and Misinformation*

In this chapter some themes from previous chapters come together—in particular around concepts of natural information, agency, fiction, and creativity—to offer an account of the modern-day cult of celebrity. I argue that new media technology repurposes these concepts, especially through the manipulation of our most salient form of natural information—light. Celebrities, like superhuman agents, demand our attention. In the process I argue that modern celebrities are the new superhuman agents, and that the cult of celebrity provides new myths, narratives, songs, and jokes for modern religion. We behave the way we do these days partly because we want to be like the fictional characters we see on screens.

According to Hans Penner's definition of religion, which I have modified slightly to include the concept of institutions, religion is a communally instituted system of propositional attitudes and practices related to superhuman agents. These attitudes and practices are transmitted through myths and rituals. Myths are orally transmitted stories about the deeds of superhuman agents (Penner 2002, 169). Such stories go very far back, and if theories from previous chapters are right, the narrative structures of such stories may have provided the scaffolding for the development of uniquely human cognition. In those chapters I argued that some form of narrative provided the ground for human metacognition to emerge.[1] Such narratives were likely musical in nature. I gave an account of how this emergence happens with respect to semantics and enactive cognition.

Humans have never stopped creating narratives; rather, they seem to have become even more abundant in recent years. The earliest narrative songs people performed were about the world around them. Of particular importance for nomadic hunter-gatherers was keeping track of time and space (Gill 1998). Before humans settled down and became more sedentary, erecting enduring physical structures such as temples, stone henges, or towers like the one Hillalum was helping to build and biblical authors polemicized against (see the introduction), they had to rely entirely on mental media and what I have been calling natural information in order to triangulate in space and time. Aside from geographic information, the constellations would have been one of the best ways to do such tracking. In order to retain knowledge about such constellations and their causal powers, humans told stories about them. The characters in these stories were some of the very first superhuman agents (Williamson 1987; Rogers 1998)—for example, the anthropomorphic bear shape in Ursa Major and Minor seen by many cultures throughout the world (Frank 2015).

Hollywood's Stars

Today we don't look to the night sky in order to find our way, but to new constellations of light on manufactured screens, which are increasingly held in our hands. An early and exemplary mark of this change was Hollywood's so-called Golden Age. Renato Casaro's *Invitation* (figure 5.1) is the type of print that one would find decorating the walls of an ice cream parlor in Amsterdam or a pizza shop in Berlin. It is kitsch, but I also think it says something interesting about modern myths. Modeled on Da Vinci's *The Last Supper*, it replaces Jesus and his disciples with classic powerhouse Hollywood celebrities. Marilyn Monroe is Jesus, and male celebrities of the 1950s and 1960s surround her. Instead of bread and wine, they feast on burgers, hard alcohol, and ice cream. Not only does Casaro's painting embody the commoditization of celebrity with Monroe as sacrificial victim, but it also represents the replacing of traditional religion with the cult of celebrity. Just as Christian stories absorbed Roman, Greek, and gnostic belief systems after the advent of literacy technologies—in particular the book (MacMullen 1984; Gaur 2000)—so perhaps modern celebrity is replacing religions of the book through new forms of media technology such as television, film, and Internet. This trend is accelerating further with new screen technologies in the form of mobile phones and tablets.

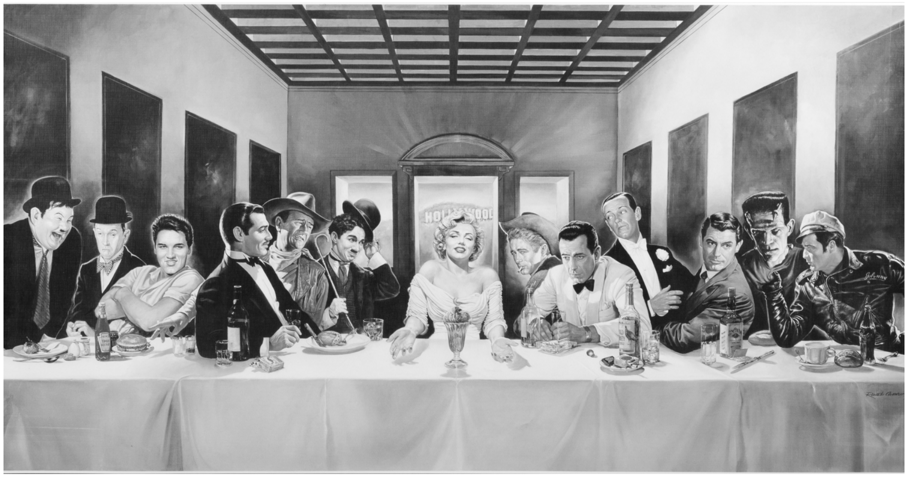

Figure 5.1
Renato Casaro's *Invitation*.

Serious students in the study of religion lately balk at the tendency to blur the line between religious phenomena, like what goes on in churches, synagogues, mosques, and temples, and "pseudoreligious" phenomena, like what goes on in classrooms, sports stadiums, and department stores. This impulse should be protected by teachers in the study of religion. For example, one could argue that ancient religions were quite serious and were shaped by the best minds in history, so nothing in pop culture is comparable. At the same time, this impulse should not be pushed too far. For example, many of the brightest minds in the last one hundred years have gone into entertainment and marketing industries, into pop culture.

One of the reasons we always wind up with a mess around the borders of what constitutes religion is because no one can agree on a definition. We know religion involves gods (or some similar type of superhuman agent), rituals, and myths. But those terms themselves have also been subject to decades, if not centuries, of debate. I think a useful way out of this is to say that we can have both wide and narrow definitions of religion. The narrow definitions, like Hans Penner's, require us to strictly police the border between what is and what is not religion. The wide definitions, like that of Durkheim (and those inspired by him), require us to loosen up our ideas about gods, rituals, and myths.

Pete Ward considers modern celebrity culture to be a religion-like phenomenon, or what he calls "para-religion" in order to distinguish it from religion proper (Ward 2011, chapter 3). As we have seen, this distinction has never been that easy to draw, but I think the term is useful for those who balk at direct comparison between religion and other forms of popular culture. Modern parareligion around images shares a cognitive foundation with early religions, but a lot has changed. A dominant characteristic of human cognition is its plasticity, the ability to adapt to new circumstances and new environments (Bjorklund and Rosenberg 2005). There is a feedback between biology, cognition, and parareligious imagination. For example, the rise in diabetes in late-modern societies is very much a product of couch potato religiosity, where our dominant forms of awareness and imagination are dictated by television and computer screen. Thus, we can imagine Marilyn Monroe in *Invitation* praying over her ice cream sundae, her body and her blood infused with the sugary products of the modern food-industrial complex.

It has been argued that the evolutionary origins of religion go back to ancient caves where people painted images of various animal agents around them (figure 5.2).[2] Wiebe (2009), following Lewis-Williams and Pearce, finds that human beings tripped out on the rock art they created, possibly augmented with the use psychedelic drugs, or what Smail calls "psychotropic mechanisms," a category which also includes alcohol and even literacy (Smail 2007). These scholars think that changes in symbolic technology precede cognitive and economic changes such as consciousness and agriculture, and likely provide the basis for them, not the reverse. Media technologies, in other words, have a feedback effect on cognition and consciousness, pointing in unpredictable and dynamic directions when such technologies interact with human cognition. In the language of my previous chapters, the argument is that information has a life of its own and that fictive media are part of human consciousness from the beginning.

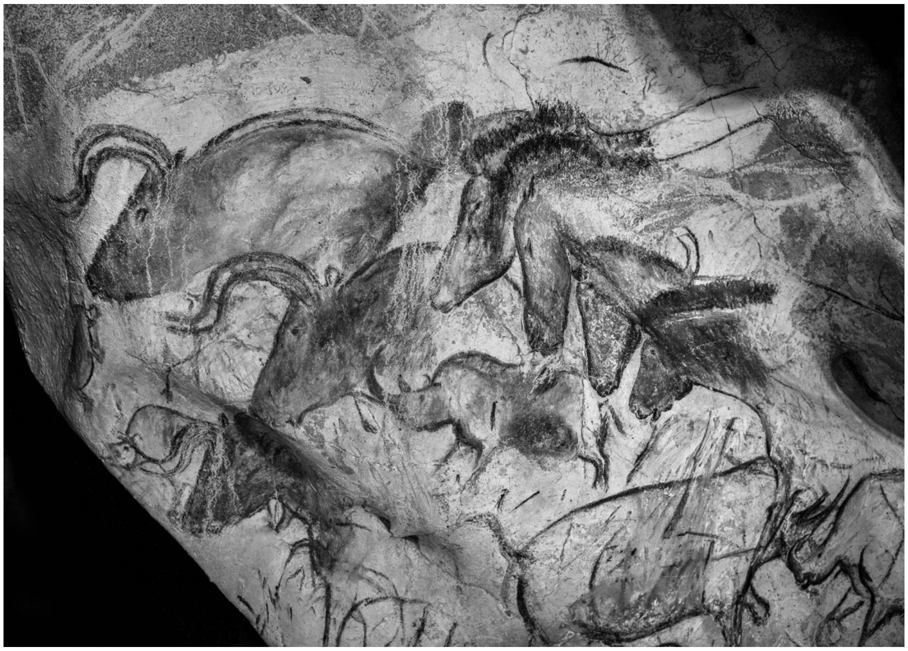

Figure 5.2
Painting in the Chauvet cave, 32,000–30,000 BC. Photo credit: by Fine Art Images/Heritage Images/Getty Images.

The rock images tell a story, whether verbalized or not, about the awareness our ancestors had about the agents with whom they interacted (see Murray 2015). Of course, we do not know what was going on in their heads, but perhaps that does not matter. Religion is made up of the external representation of such agents, the fact that they are imaged and thus imagined. There is something intrinsically religious or "sacred" about recording information (ספר from the previous chapter), perhaps because recording of any kind is a form of memory, of reproduction and tradition. The first scripts were deeply connected to animal shapes; in particular, animals were the basis for many of the first alphabetic signs (Schmandt-Besserat 1992). These animal forms were those of domesticated animals, animals of agriculture technology and husbandry (Abram 1996).

Biblical religions are also obsessed with images. The biblical deity makes man in his image, refuses to let his people worship any other image, and cannot in fact be represented in an imagistic form (Laderman 2009, chapter 4). Traffic in images has come to define the modern condition, but of course there is a natural history to this, laid out clearly first by Walter Benjamin and later by Benedict Anderson, who ties modern traffic in images of "print-capitalism" to the nation-state (B. Anderson

2006, 37; Benjamin 2008). For a while, in Protestant cultures, the proliferation of images largely took the form of the images of literacy—that is, words, letters, and numbers—but since the explosion of transistor and computational technologies, the bandwidth has grown to allow for a much wider distribution of images in general and especially moving images (G. Levy 2010).

The images of gods also change depending on the very same feedback with technology—that is, gods change depending on the various media in which they are represented. Our understanding of religion should not be limited just to gods, but to the host of superhuman agents that animate religious imagination. In most religious systems except the most domesticated, these superhuman agents live easily alongside the high God or gods. As Guthrie gave us some insight about in chapters 2 and 3, animals are often the superhuman agents in religious narratives. In some versions of these narratives, gods take on more human form, often as a hybrid between human and (nonhuman) animal.

Parasocial Kinship

Etymologically, the term "celebrity" derives from the Latin word for "thronged," "honoured by a great assembly," and "famous" (OED). Though in the fourteenth century Geoffrey Chaucer used the word in his translation of Boethius's *De consolatione philosophiae*, the first attestations in modern English appear in the early seventeenth century. The origin of the word is related to the verb "to celebrate." The connection of this concept to ritual runs deep, for it involves the "due observance of rites and ceremonies." Celebrities are the people we celebrate.[3]

I think celebrities belong to what Maurice Bloch (2008) calls the "transcendental social." As an alternative to standard cognitive approaches to religion that see religious beliefs as minimally counterintuitive, Bloch argues that religion is largely a by-product of our "capacity to imagine other worlds" (2055–2056). Other primates have complex social worlds and thus share with us what he calls the "transactional social," which is likely tied to similar mechanisms, such as grooming, discussed by the primatologists in earlier chapters. Only humans, Bloch thinks, have essentialized roles and groups, normative roles based on status, such that we also interact with the "transcendental social." For example, he emphasizes that in African societies that have "elders," elders and ancestors have the same essential status despite the fact that the former are alive and the latter dead. Being dead does not deprive one of membership in the transcendental social, and people in those societies continue to interact and communicate with dead ancestors and loved ones as if they were alive.

For Bloch, cognitive approaches should focus on trying to understand human sociability and social cognition; in the process, then, we will come to explain religion (2060). This is so because "once we realize this omnipresence of the imaginary in the everyday, nothing special is left to explain concerning religion." Similarly, in the case under examination presently, though some would not strictly characterize the modern cult of celebrity transmitted through televisual, cinematic, and social media screens as religion, I think it conforms in the sense that the characters that make up the cult are part of Bloch's "transcendental social."

Ward (2011) finds that celebrities are by and large not understood by their fans as "gods" but as family members, a phenomenon he calls "para-sociality." The ironic part is that Ward thinks this should disqualify the cult of celebrity as a religion, whereas if we see kinship in light of Bloch's understanding, the cult fits quite neatly with various forms of ancestor worship. If we understand religion to involve social practices not just to gods but also to varieties of superhuman agents who blur the line with "purely" fictional agents, understanding the cult of celebrity as religion is no longer a problem. This position on the matter is much closer to Laderman (2009), who has no problem conceptualizing modern forms of popular culture as religion, than to Ward, who I think retains some theological baggage in terms of reticence of equating celebrities with God.[4]

Personality

Modern celebrities are parareligious gods. Echoes of this argument have been made many times before, perhaps most vividly by Neil Gaiman in his *American Gods*. He does not quite argue that celebrities are gods, but rather that new technologies, personified by characters such as Technical Boy and Media, are treated as divine because people direct the same things toward them that they do toward older gods (Gaiman 2001). I complement ideas like this with some insights gained from previous chapters concerning the longue durée of evolutionary history and in light of the dynamic feedback between cognition and technology.

My analysis starts with the story of James Franco, a great example of postmodern celebrity in which a celebrity is hyperaware of himself. Franco is a successful Hollywood actor who has recently had his share of controversy (Miller and Kaufman 2018). One of the more interesting roles he has played is a character named "Franco" in the soap opera *General Hospital*. The character is a serial killer who thinks he is the actor James Franco trapped in a soap opera (much like Peter Weir's *The Truman Show* [1998], but with a twist). Celebrities, like most people, are aware that they have split personae, a private persona they perform with their close friends and loved ones and a public persona they perform for a wider audience. The public persona is very much about image; it is the production of an image that in modern societies goes through the mechanical process of technological reproduction described by Benjamin and Anderson.

Sometimes the two personae get mixed up, and of course the hallmark of a good actor is the ability to create wholly new personae. Franco appears adept enough to play with the constructedness of personae. His visit to *The Colbert Report* in 2011, however, highlighted Colbert's more virtuosic performance of persona (Colbert 2011). Stephen Colbert played his alter ego, Stephen Colbert, who was the host of the show in which he embodied the right-wing media machine of Fox News and especially host Bill O'Reilly. In their conversation, both Franco and Colbert agreed that since Colbert actually takes his act on the road, outside the confines of the studio—for example, by speaking before the US Congress as the character Stephen Colbert—his is a more virtuosic form of performance art. Another example of this type of performance art was Colbert's successful lobbying before the Federal Elections Commission (FEC) in order to start his own "Colbert Super-PAC" as an ironic protest against campaign finance rules. What was new was not that he was performing a certain self; rather, it was the kind of hyperawareness and playfulness, the authentic faking, he exhibited in doing so (Chidester 2005). Other pertinent examples of this postmodern form of imaginal awareness are present in several of the films from 2010: *I'm Still Here*, *Somewhere*, and *Teenage Paparazzo*.

Compartmentalization

Not enough attention has been paid to the dominant celebrity-making machine: acting. I think there is little difference between acting and the more obviously religious phenomenon of possession (see Cohen 2007). In both cases a narrative character, a persona, with either a mythical apparatus behind her or a carefully constructed script, is embodied in a particular performance (Firth 1967; Easterling 2002).

This point has been alluded to in a number of studies of celebrity, such as Giles (2000), where he compares celebrity to "'possession states' entered into by the Kalasis of Orissa in eastern India" (102). Giles does not think modern celebrities are "conduits for the Gods" as they are in eastern India, but rather the parallel is the "discursive ascendancy," (103) the prestige and social power celebrities achieve by embodying other characters. As should be clear by now, I think the border Giles wants to draw in this way between possession cults and modern celebrity in terms of religion is arbitrary.

Similarly, in her ethnography of possession cults in Belém, Emma Cohen reflects on the similarities between possession and acting. Human beings quite easily and intuitively understand the migration of minds and the possibility of one mind (or soul) inhabiting the body of someone else. Part of this is due to what scholars in cognitive science now call, following Bloom (2005), our "natural-born dualism." The basic question involved in this discussion goes back to the core arguments about anomalous monism in this book, about the relations between the mental and material, between minds and bodies. The issue gets more complicated, though, because while one can make philosophical arguments about metaphysics—whether one should be a dualist or a monist, or a dual-aspect monist—another question is how human psychology develops to conceive of such distinctions.

To illustrate the similarities between possession and acting, Cohen discusses the character James Bond, who goes through various incarnations after the actor who plays him gets too old (from Sean Connery to Daniel Craig). Different actors embody the soul, or character, of James Bond. For Cohen, in both film acting and possession there is thus a transferring of agency or personhood when the performer embodies the fictional character; in other words, "as with the actor, the possessed person's agency is replaced by, or eclipsed by, an alternative agency. In both possession and film contexts, behaviors and statements are no longer attributable to the intentions of the actor" (Cohen 2007, 140).

But Cohen balks at making too much of the comparison: “Possession, however, is not presence. The possessed person is said actually to incorporate a new character or person, not simply to ape another person or an imaginary role” (140). So we should be wary of making too much of the similarities between the two phenomena. Cohen argues that in most cases with actors, the audience recognizes pretense operating in a different way than in possession cults. But I think we should also be careful about making too much of the difference. As Gananath Obeyesekere shows, much of our understanding of so-called primitive or indigenous religion is actually a performance for the anthropologist (Obeyesekere 1997). Not only that, but as we saw in Dan Sperber’s story of old Filate in chapter 2, it is also the case that much of our understanding of so-called primitive or indigenous religion is actually a performance *of* the anthropologist. Much of what we take to be religion is actually implicit folk theorizing about performance, and the folk are often much more aware of the blurry line between pretense and belief than scholars give credit. Furthermore, the technique of method acting blurs the line even further between possession and acting.

Cohen discusses David Fincher’s film *Fight Club* (1999), in which Brad Pitt plays the dissociated personality of the anonymous main character of the film, who is played by Edward Norton. Cohen is wrong in supposing it is difficult to understand the final twist in the film. I think filmgoers quickly grasp the idea that Brad Pitt in Brad Pitt’s body plays a dissociated persona (aka Tylor Durden) of the main character, who is played by Edward Norton. The conclusion of the film represents the battle of the two identities within one body. Cohen’s insights into dissociative identity, possession, and acting are illuminating, so I do not think her confusion about the ending of the film amounts to much, except it may throw a kink in the points she wants to make about intuitive dualism.

She writes,

> Likewise, the twist at the end of *Fight Club*, in which we are forced not only to reflect on the dual personalities of a person suffering from Dissociative Identity Disorder, but also to accept that they coexisted simultaneously; yet autonomously both mentally and physically, is more than our mental tools can cope with. Workable concepts of people are constrained by implicit ontological assumptions that intuitively tell us that people are indivisible, individual, nonreplicable, and continuous. (140)

As I see it, Cohen seems to misread the character of Tylor Durden, who is a mental projection of the anonymous main character played by Norton.

The final scene should be seen as a metaphoric struggle between the main characters' two personae. So, in fact, Durden is not physically autonomous at all. Perhaps Cohen's points go to the fact that it is very difficult for us to represent such a struggle without resorting to the use of two actors who are physically autonomous. As far as the film, though, the twist resolves rather than overloads our "mental tools." In other research, Cohen and Barrett (2008) have argued that the default position for mind migration is that two minds cannot occupy the same body simultaneously, so this is probably the point she is trying to make, but I do not think *Fight Club* is problematic for our "mental tools" in this regard.

One method by which the embodiment of outside agencies takes place in both acting and ritual theatre, of which I think possession cults are one variety, is through the manipulation of image through costuming and, in traditional societies, often through the use of masks (Cohen 2007, 153). Deeley (2004), following Sperber and Hirschfeld (2004), characterizes ritual devices such as masks, which exaggerate "salient features of facial expressions," as "superstimuli" (257). Superstimuli are the "primary reinforcers" that enhance attention, arousal, and emotion in many forms of ritual. Besides masks, other examples of such stimuli are "motion, colour, luminosity … accentuated sexual characteristics (cosmetics, oils), sudden loud noises (e.g. fireworks, bells), prosodic accentuations of language (singing, chanting), pain (flagellation, circumcision), temperature (baptism by immersion), smells (incense, perfumes), taste (ritual foods), and multisensory repetitious stimuli which activate arousal systems" (Deeley 2004, 257; see also Rolls 1999). Films such as *Fight Club* utilize a number of these primary reinforcers, such as motion, luminosity, and noise, and in this case achieve the effect of masks simply by using another actor to play an alternative personality (Pitt).

In cognitive research, facial expression is notoriously tied to our very basic emotions, control over which is often understood to be beyond the reach of the conscious mind (Ekman 1993; Ekman and Friesen 1971, 2003). Good acting, like masking, is a technology to control facial expression and thus to manipulate our emotions. This cognition has a history. For example, masks were an important mode of image manipulation in the earliest moments of theater in ancient Greece. Theater was inextricably bound up with religion in the sense that theatrical celebrations were usually tied to the religious calendar and location, to orientation in time and space. The earliest performances were almost certainly tied to movement in the heavenly constellations. In addition, the performances were usually based on mythological themes in which the actors embodied the gods.

In religions with ritual performances of possession, human beings embody gods or other superhuman agents; the actors are possessed by the gods—that is, they “act” like gods (J. H. Turner et al. 2018, 208–212). Greek theater has its origins in this form of religion (Gaster 1950; Csapo and Miller 2007). To the extent that the cult of celebrity is built around actors, especially Hollywood actors, it is a kind of possession cult. Unlike most possession cults, however, the cult is communally instituted around the images of the actors that appear on screens rather than the characters they embody in their roles.

The ancient plays *Philoctetes*, *Oedipus Tyrannus*, and *Oedipus Colonus* by Sophocles, play around with similar interest in celebrity, which indicates that some ancient Greeks had a profound understanding of the concept. In general, celebrity was a primary goal of the hero. Unlike the gods, who did not die, the only way for the mortal hero to live beyond death was through his name. Celebrity, then, is implicitly tied to the fact that we die. Though it only happens in rare cases, the goal of the hero, in effect, is to be deified. The gods, by contrast, are famous by default. Celebrity is thus something inherent in the notion of a god. As we saw in the introduction, this desire to make a name for themselves was one of the main problems Yahweh had with builders of the Tower of Babel, according to Genesis.

Stars as Natural Information

Returning to Colbert’s conversation with Franco, another interesting aspect of modern celebrity emerges. Colbert and Franco agree that Franco’s critics see stardom as the pinnacle of achievement in American society, so a star should not complain and should not want more. Franco clearly did want more, for at the time of the broadcast he was pursuing a PhD at Yale. Instead, what most cult members want to see is the meteoric rise of a star and an equally dramatic fall. In essence we want to see rising and dying stars.[5]

A basic characteristic of plant and animal life on this planet is that light is a source of natural information that attracts attention. Sometimes the force of attraction can be so strong that it becomes dangerous, like the proverbial “deer in headlights.” Fire was not only the original source for converting raw food into cooked food, but it was also the first source of “artificial” and transportable light (Wrangham 2009). Power came in its centrality in the home and village, as a source of warmth and a gathering place to tell stories. At night, especially, other sources of light stood out as beacons of attention, as guides in ancient wanderings, as signs of things to come. Early temple structures and sacred centers derive from a much more ancient village structure with a fire at the center and may have been as much about protecting the communal flame as any other sacred premise (Stausberg 2018).

Mythmaking began with initial reflections around these sources of light, these sources of energy, language, and fertility. Indeed, almost all of the energy stored and consumed on the earth came here from the sun, most of it stored in long-dead plants that have become coal and petroleum. This connection between luminosity and religion goes as far back as our language system, for “while the Indo-European languages had no common word for religion, they concurred on the meaning of God as ‘luminous’” (Benveniste 1973; Friedland 2002, 414).[6] Presumably we call Hollywood stars “stars” because they burn so bright.

Ancient humans recognized the stability and structure of the heavens, admiring “the untarnished stability of the stars” (Brown 2015, 2). Mircea Eliade even argued that the cyclical patterns of the heavens were a fundamental underpinning of consciousness (Eliade 1954, 6ff.). Today we are less focused on sources of natural illumination, but we are no less dependent on sources of light as reflective embodiments of consciousness.

A good way to think about the relation between cognition and the bright organized information around us is the concept of “extended cognition” (A. Clark and Chalmers 1998), which is aptly summarized by the motto “The world is its own best model” (Brooks 1990, 5, 13). This is the idea that cognition will almost always rely on heuristics already available in the world as platforms for further thinking, rather than going through the costly process of building new models. If the models provided by the world already work, it is inefficient for the mind to build intermediate representations. This makes sense of the fact that the stability and structure of the heavens is embodied in human institutions. In this way our minds extend into the universe. The position I have defended in this book modifies this point to say that the universe also extends into our minds.

Stars as luminous bodies are both absent and present. They are distant yet corporeal. As Lynne Joyrich writes, “The same structure of knowledge and belief that defines the cinematic apparatus also defines the general paradox of the star phenomenon.… Stars seem close yet distant, both present and absent to us” (Joyrich 1993, 77). In such a way, the phenomenon of stardom reorients the traditional private/public opposition. The intimate details of stars’ private lives are publicly relevant. We gossip about them, a practice that we saw traces back to grooming behavior in humans and other animals. The star is everyone’s sister, friend, and lover. We know her on a first-name basis. She is part of our family. In contrast to distant high gods we travel to worship, the star comes to us in our homes, at our domestic altar. Television screening is a ritual affair, where the television functions similarly to the altar (Goethals 1981). It often holds central place in the “family” room, is elevated so everyone can see it, and regenerates the religious logic of fame. Pop stars are part of our family. We talk dirt about them as if we know them; we live vicariously through them. With new types of handheld screens, rituals change and we all become celebrities.

“Do You See the Light?”

For a few million years hominids roamed the earth entirely dependent on the sun, moon, and stars for sources of light. Primate vision, and vision itself for that matter, is dependent on the reflection and refraction of light off objects that in turn activate neurons in our visual cortex. On a cloudy night, when moon and stars were not visible, our ancestors would have been easy prey for better-seeing species. We developed as a species to prefer light to dark and to connect light, relevance, and attention at a very deep level. There is a great deal of evidence from cognitive and brain studies that the brain processes objects that emit light differently from those that do not (Leonards et al. 2005; Correani, Scott-Samuel, and Leonards 2006).[7] Postanalytic philosophers have also claimed that vision and cognition are two sides of the same coin (Sellars, Rorty, and Brandom 1997). The connection between the two is captured in the everyday phrase “Seeing is believing”—that is, when we see something, we have a very strong inclination to believe it. In this sense, without vision, primate thought would not be possible.[8] It was not until the use and capture of fire some one to two million years ago that our genus was able to master light to some degree in the form of torches and campfires, though the technologies continued to evolve, first with oil lamps and eventually with the invention of the light bulb.

Aside from the cognitive changes associated with cooking food (Wrangham 2009), the control of sources of light must have had decisive cognitive effects. The control of light and vision took a quantum leap with the invention of televisual technology toward the close of the 1800s. A campfire and a television can have similar brightness (depending on the stage of the fire), but it is only with the television that the brightness is under precise control by a producer. While the performers of ancient myths told stories around the light of the campfire, modern mythmakers and admen are able to manipulate the light itself. Such forms of luminous control lead Don DeLillo, in the epilogue entitled "Das Kapital" to his opus *Underworld*, to characterize television as an "epidemic of seeing" (DeLillo 1997, 812). More recent screen behavior appears to be an even more radical epidemic of seeing. Celebrity culture has probably existed since those early forms of mythology; however, it took a decisive turn with modern methods to control visual activity.

Manipulating Light, or the History of Religious Media Technology

The technologies for manipulating light have evolved over time. In *Underworld*, we zoom in on some conversations going on in an advertising agency in 1961:

> They're doing research, Dwayne, on what they call retinal discharge. They secretly photograph women in supermarkets. They have sensitive cameras hidden on the shelves that record excitations of the inner eye, motions of the eye far more subtle and telling than a simple blink, and it seems that women go completely crazy eyeballwise when they see certain colors, packages and designs. These are orgasms, basically, of the eye, the brain and the nervous system. How do we use this research? Simple. We correlate high discharge events with the particular items that caused them and then we design our products and packaging accordingly. Once we get the consumer by the eyeballs, we have complete mastery of the marketing process. (DeLillo 1997, 531)

The idea that admen are the modern-day mythmakers, the scribes of modern consumption and commodity fetishism—which in many ways provides the raison d'être for the cult of celebrity and vice versa—is not far from James B. Twitchell’s argument in *Adcult USA* (Twitchell 1996). Mythmakers have gone from singing collectively authored ancient narratives about the deeds of celestial animals, women, and men (audience staring at the sky) to crafting narratives about the deeds of celebrity animals, women, and men (audience staring at screens). Within the past ten years, a newer form of advertising has become popular, called *neuromarketing*. This school of thought uses behavioral psychology and neuroscience to craft the most-effective marketing tools.[9]

The origins of the modern American incarnation of this phenomenon were largely brought on by a mass of European immigrants to the US who tried not just to establish a life for themselves but literally to create the American dream (Gabler 1989). The new form of religious worship parallels a general turning inward and privatization of religion (Schmidt 1997). We share televisual culture, but we experience it in the solitary comfort of our living rooms. The movement to portable, personal computing amplifies this process even more. This is not to deny that there are collective moments of televisual religion, when bros watch sports or a family sits down in front of the television together. Mobile phone technology may even be reconfiguring collective religious life by allowing it to be more generally distributed in space (Ling 2008). The privatizing movement of televisual religion therefore probably belongs to the twentieth century, and we are now moving to a new dawn of technological religion.

Imagination

In chapter 2, I discussed what I see as the relation between fiction and “reality” with regard to religious agents. I argued that there is not much of a difference between fictional agents and religious ones. The difference, if any, will be developed intersubjectively in the course of triangulating over an individual’s lifetime. In this sense, in order to understand something like the cult of celebrity we must view it in developmental terms. Like gods, stars somehow skirt the line between fiction and reality, particularly for children. Stars and gods are both fictional and real. We learn about the nature of reality intersubjectively through that ambivalence. In a closely guarded set of myths, parents can police the retinue of characters who enter into their child’s imagination.

Religious characters such as gods, spirits, talking animals, and other superhuman agents were the leading characters in the oral and written myths of popular culture before the invention of the secular novel and the video camera. Nowadays the relevance of these characters competes with other "memes," largely because screens reach directly into the private sphere. As we saw in chapter 2, from an anomalous monist perspective however, we should be careful with overly representationalist models of mental content. Rather than being analogous to genes, I prefer to see religious ideas or systems of representations as organisms that affect our behavior and ours theirs. Religious ideas are thus more like the protozoan parasite *Toxoplasma gondii*. This particular organism rewires neurons and causes behavioral changes in many mammals. It can only reproduce in cat stomachs, and when it infects mice, it causes them to be more likely to approach cats because they lose their fear of cat urine. In humans, infection has been linked to risky behavior and schizophrenia (Burgdorf et al. 2019). Indeed, much of our behavior may be influenced by other minds living inside us (Sapolsky 2017).

As noted in previous chapters, scholars from the cognitive science of religion, among other fields, have developed answers to why special types of characters, whether stars or gods, are sticky in our memories, and why some of them have intense emotional salience while others do not. This is the crux of what scholars term the "Mickey Mouse problem" (Bulbulia 2004, 662ff.). Mickey Mouse is not a god, as we saw in chapter 2, because he does not activate the right emotional matrix (Pyysiäinen 1999). Perhaps Mickey is an unfortunate example, since the myths and rites around him—in Disney theme parks, for example—clearly get people's blood moving. A more pertinent point is probably that Mickey Mouse is not a god because parents tell their children he is not one. He is not real; they do not bow down to him or pray to him (usually). However, with all that said, popular children's figures like Mickey Mouse do in fact inspire intense emotion and connection. At Disney theme parks, at least, children definitely (and probably even some adults) request things from Mickey in their interactions with actors dressed as (possessed by?) him. So we have another blurry line between fictional characters and superhuman agents. This line also gets blurred in adults, and I think this is the basis for the cult of celebrity.

In cognitive parlance since Leslie (1987), this blurring is called "decoupling," the ability to take a chunk of input from one cognitive "system" (vision, for example) as a representation and put it into another cognitive system (such as language). In its most recent phrasing, this is referred to as conceptual blending (Fauconnier and Turner [2010]; see G. Levy [2017]). To put this idea simply, in the case of fantasy, we cobble together a representation from internal or external media, thereby mixing a variety of representations, and "play" it as if it were our own cognitive representation. This is probably the basic mechanism that makes thought possible, but it is also the mechanism that allows for hybrid minds (Sperber 2010). Part of the process of learning the so-called difference between fantasy and reality is developing judgments about the nature of such representations.

In her ethnography of childhood religion in America, *Flights of Fancy, Leaps of Faith*, Cindy Dell Clark notes that psychologists in the past treated imaginal beliefs, such as belief in the Tooth Fairy or Easter Bunny, as "primitive," as a distortion of the "logical" reality (C. D. Clark 1995, 108). She criticizes the view that children have a "lack of competence in the proper evaluative procedures" when they make different reality judgments (108). She emphasizes that the construction of reality is a dynamic and ambiguous process that children learn to navigate with the help of rites of passage that mark their transition from one stage of knowing or maturity to another. For example, a new stage is reached when children begin to recognize that the Tooth Fairy is fictional—that is, "children gradually come to know that there are representations involved in such objects" (109). It is not always that the characters are regarded as unreal, but rather children have a more nuanced understanding of the representations of those characters. In other words, children become conscious of play; or more technically, they start to develop the so-called appearance-reality distinction (Flavell, Flavell, and Green 1983; Goldman 1998). Children are in the process of deciding what counts as real for themselves, in what Giddens called the development of "ontological security" (Giddens 1991, chapter 2). It is important to note that this developmental trajectory may emerge in a multitude of ways depending on cultural context, partly because what counts as ontological security will vary in different cultures.

Clark notes that adults are only slightly better at parsing real and unreal objects; they are "inextricably part of the process by which ongoing, shared cultural reality is continually co-constructed" (C. D. Clark 1998, 108). Another way to say this is that adults tend to "parse" characters they see in media as real and unreal in slightly different ways than children. Adults are more aware of the production process that goes on behind media figures. In terms of the distinction between appearance and reality, however, adults are also easily confused and manipulated. Who is more confused, the parent who pretends the Tooth Fairy exists or the child who "believes" it?

The popularity of "reality" TV, and indeed having a US president in Donald Trump who typified that genre, has tended to blur that line even more. In these shows we have characters who, like Colbert and Franco, play a version of themselves. Politicians, similarly, play themselves on screens. Phenomena like these have sparked assertions that the simulations are in some sense more real in a postmodern world than the everyday lived reality they are supposed to represent. Both children and adults have difficulty parsing the distinction, because fictional objects are actually quite real; we are constantly attributing reality to those characters in our daily lives, whether on TV, the Internet, or "live." Adults simply sometimes do so with more self-reflection.

For example, often-noted media figures in the past such as Elvis and June Cleaver blurred lines in the adult imaginary. Clark relays the story of Robert Young, who played a physician on TV yet received some five thousand letters a week for medical advice (Gitlin 1987). These figures often serve as "mentors and role models and thereby have effects on actual social relationships" (C. D. Clark 1998, 108). She argues that such fictional figures are closely related to Donald Winnicott's notion of childhood "transitional objects," such as security blankets and teddy bear–type imaginary friends, as a way for the inner life of the child (and adult) to achieve some immediacy in the public life of the group. These objects occupy an intermediate space that gives "pleasurable 'relief' from the strain of relating inner (personal) and outer (shared) experience" (110).

An immense body of research has been conducted on children as media consumers and in particular on reality versus fantasy judgments about television (Noble 1975; Morison, McCarthy, and Gardner 1979; H. Kelly 1981; Chandler 1997; Brunick et al. 2016; Dill-Shackleford 2016;

Desmond 2017; Richert and Schlesinger 2017). The basic consensus is that the gap between fantasy and reality in children's programs actually helps them build up their capacity to discriminate between the two. Young children appear to prefer a very wide gap, as represented in many cartoon shows. As time goes on the gap tends to grow smaller, but it is always nonetheless present (see figure 5.3).

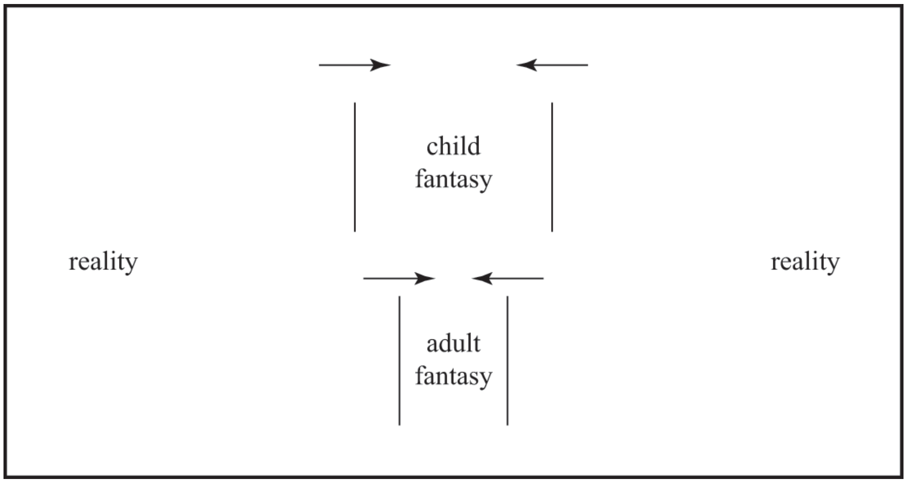

Figure 5.3
Relationship between fantasy and reality.

Though from a certain perspective child fancy grows smaller as we age, we could also say that reality, in fact, is what grows smaller, since the "space of reasons" by which we operate on a day-to-day basis becomes more and more confined (see figure 5.4).

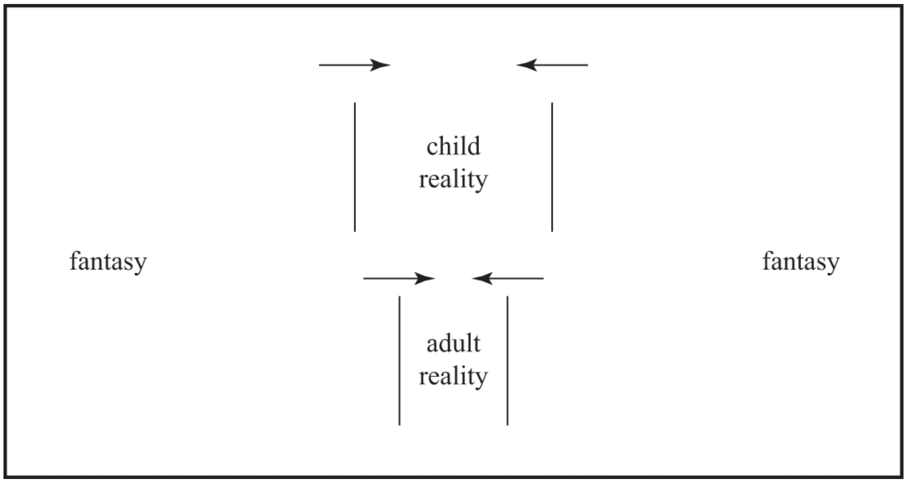

Figure 5.4
Relationship between reality and fantasy.

Scholars argue further that the frightening status of many cartoon characters helps children learn about “constructedness” and to “distance themselves from emotional responses and disturbing scenes” (Chandler 1997, 66). When we fail to gain this distance, either as children or adults, I think “truly” religious characters emerge, whether in religion proper or in the cult of celebrity.

To be more precise, researchers have for a long time argued that there is not one version of reality but multiple reality “dimensions” or channels. In 1977 Hawkins discerned several subdivisions in children’s perceived reality; he thus found that child development “may take place along some dimensions but not others, or changes may occur at different rates or times on different dimensions” (Hawkins 1977, 305–306; cited in Chandler 1997, 66). In other words, we have a developmental trajectory with various interacting modalities concerning fantasy, or inner worlds, and outer realities, or public worlds (see figure 5.5.).

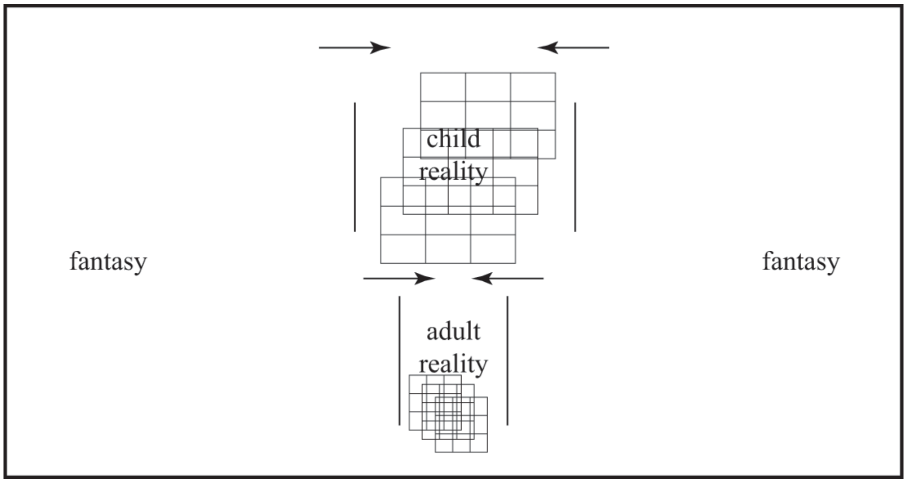

Figure 5.5
Relationship with dimensionality included.

Possession cults occupy a similar ambiguous ground for the people that participate in them (Cohen 2007). Possession involves a willful blurring of the line between "fiction" and "reality." If we ask the participants, they literally believe that a god, spirit, or the like has entered the body of the performer. I am not arguing it is their belief that needs to be reconsidered, but our perspective on it that implies a certain presumption about what it means to be a person and an agent. In other words, gods and other superhuman agents *are* fictional characters, full stop. And fictional characters play an immense role in human social life and psychology. Getting in contact with these characters is one of the most basic features of religion.

Taming Animals

> Because the secluded mediator, conterminous with the wild, learns to control instinctive proclivities (fears, lust, and so on) he is in effect the very image of purity through self-mastery. Thus by pacifying animal desires and mental impurities (*kilet*) the forest monk is understood to "not only subdue but to incorporate its powers."
> —James L. Taylor, *Forest Monks and the Nation-State*

> The Syrian could live with his desert as long as he was prepared to merge into it, to adopt the total informality and lack of structure of wild life, to keep constantly on the move in search of food and water, to live off roots, to be equated with the beasts and especially the birds—ambivalent symbols, for Late Roman men, of both the free and the demonic.
> —Peter Brown, "The Rise and Function of the Holy Man in Late Antiquity"

The psychotropic rock art Wiebe considered the origin of religion, pictorial representations of animal life, mirrored a cosmos of heavenly lights, constellations of which were, more often than not, also understood and systematized with animal and animal-human hybrid forms. These animals were the characters of our most ancient narratives. As we saw in chapter 3, animals were the primordial nonhuman persons, a natural place to look for idols of alternative agency, agencies of the type discussed by scholars of enactive cognition (Di Paolo, Buhrmann, and Barandiaran 2017; Di Paolo, Cuffari, and De Jaegher 2018). Many cognitive scientists trace religion to our early interactions with the animal world, whether reacting obsessively to dangerous things (Boyer and Liénard 2006) or camouflaged forms of agency, as the discussion of Guthrie noted in chapter 2 (Guthrie 1995, chapters 2 and 4).

Like the more ancient cases, modern celebrity is animated by charisma. Celebrities are phenomenologically understood to tap into the animal life force. They are those performers who have *It*—that so-called indefinable "star quality." You either have *It* or you don't. *It* is one of those very difficult characteristics of someone that is hard to define. The celebrity perhaps most exemplary of this type of charisma was Elvis Presley, who takes the place of Saint Andrew in Casaro's *Invitation*.

Elvis's celebrity would not have been possible without television and screens (Doss 1999; Hecht 2004). Much of his appeal was aesthetic. Much of his appeal was that he was white (Bertrand 2000). He came on the scene as a dangerous and sexual figure. One of the most famous incidents of Elvis lore occurred when Elvis appeared on *The Ed Sullivan Show* in 1956. Sullivan refused to show Elvis from the waist down. His gyrations and contortions were too animal, raw, and sexual. "He tapped into what the show's producer, Steve Binder, called 'the darkness, the wild, untamed, animalistic things' that were such a part of his nature," writes Nicholas Jennings (1999, 59).

We see in other celebrity figures this dancing along the opposition of nature and culture, the blurring of lines between human and nonhuman animal. Male stars in particular such as Charlie Sheen have cultivated a so-called animal nature, often to great ruin. The spectacle of celebrities going wild is now a global pastime.

What counts as tapping into nature will vary according to cultural context. However, a necessary characteristic of the charismatic is her ability to mediate nature-culture oppositions, to constitute these oppositions with her very body. Whether holy person, intermediary, or saint, these individuals serve as liminal characters. They mark boundaries in the vertically transcendent social, not only between the human and superhuman but also between the human and the animal.

Centralization of religion tends to follow the centralization of ritual and myth. In Seneviratne's analysis of rituals of the Kandyan state, for example, the reason is clear: ritual is a microcosm of the society as a whole that is also mapped onto the bodies of believers. The structure of and movement in the temple maps the structure and movement of the collective sacred body, which may be homologous to the bodies of subjects within religion (Seneviratne 1978).

The amplification of core values and charisma to the periphery of a cultural center is a direct function of the communicative technologies at its disposal. For example, the invention of writing had a dramatic effect on the power exchange between center and periphery. The technology of written language was thus likely a necessary element in the development of the state (Gaur 2000). It allowed for more precise methods of communication over time and space. The printing press changed things yet again (Giddens 1984, 261ff.; Goody 2001).

With the modern cult of celebrity, mythmaking centers such as New York, Hollywood, and Bombay/Bollywood/Mumbai, are displaced from political centers. The systems of communicative exchange (entertainment) and commodity exchange are interwoven. Consumption is communication. What we eat, buy, and sell takes on a semiotic substance. The pattern is still consistent with the one described by Seneviratne, but in the context of new communicative technologies the "sacred" structure is distributed in time and space, first with television and then with the Internet (Z. Smith 2010).

We are idol worshipers, and the altar of this religion is our television screen. Or perhaps it is better to state that television *was* a religion in the twentieth century. As computer and Internet technology becomes more ubiquitous, a new colonization of media is already underway. But that brief moment in time when television first entered the home and we saw the birth of the modern advertising industry was a watershed for religions of personality. Though the altar was in the private space of the home, the lights within it were minutely controlled, down to the very last detail, by outside forces.

In other words, in nonliterate and preindustrial media contexts past and present, media masters such as mythmakers, poets, and priests held sway on the bodies and minds of religious practitioners. In pre-Christian environments, children learned to venerate the various "idols" of the family and clan. Imagine the wonder of a child staring at her family altar or celestial heavens after hearing a bard weave great myths about her local protector agent. In preindustrial Europe, the life of the mind tended to be animated by the saints and royalty. As an American living in Europe, I was shocked when I first noticed the attention still paid to royal families in the media, for example, in gossip magazines. In the postmodern context, however, the television became the family altar and an entirely new dynamic was put in place. The result was the modern cult of personality around stars. With computational technologies, all of these processes are likely to change, perhaps with an even more deeply personalized version of celebrity.

In this chapter I have connected arguments from previous chapters about fictional and animal agency, information, and imagination to media technology, arguing that light as natural information is now under human control, with some radical consequences. As natural light becomes artificial, our religious impulses can be more tightly manipulated, and it is only the beginning. Technology has come to interact with information and agency in more complex ways, not just in terms of towers like Babel now, but in all aspects of our lives. The question for the next chapter is whether there is potential to recover some measure of human connection that seems to have been lost in these motions.

Notes

1. Mark Turner (1996) made a similar argument more than twenty years ago, which has recently been updated by evolutionary psychologist Jonathan Gottschall (2012). Narratives were perhaps preceded by mantras (see Staal [1985]).

2. See also the Werner Herzog's film about the ancient paintings at Chauvet in southern France, *Cave of Forgotten Dreams* (2010). The African caves Wiebe discusses are actually much older.

3. See the *Middle English Dictionary* (Regents University of Michigan) and the *Oxford English Dictionaries* (Oxford University Press), Online.

4. However, I think Laderman is wrong to accept the theory from 2003 that the evolutionary roots of celebrity should be traced to prestige (2009, 187n12). Even if we were to accept the just-so story about the origin of prestige, that tells us little about modern forms of celebrity worship,

which are more connected to technology, to seeing someone's "name in lights" (Douglas 2003). For the article on prestige Laderman cites, see Henrich and Gil-White (2001).

5. The literature on rising/dying gods is too numerous to cite in full. Frazer first popularized the idea in the study of religions. Among others, he characterized the Canaanite god Baal as such (Frazer [1890] 2009). T. S. Eliot used *The Golden Bough* as a model in his poem "The Waste Land," which incorporates many of the images under discussion in this text, such as celebrity, death, and language. See the iPad app The Waste Land.

6. Beneveniste writes that early Indo-Europeans did not have a word for what we call religion. Instead, "the only thing which could be credited to the original community would be the idea of 'god.' This is well attested in the form **deiwos*, the sense of which is 'luminous' and 'celestial'; this is the quality which marks the god off from human beings, who are 'terrestrial' (such is the meaning of the Latin word for 'man,' *homo*)" (446).

7. For a critique of "ocularcentrism," see Derrida (1978). Both phenomenology and empiricism are centrally dependent on light. I think our ocularcentrism runs much deeper than "western" thought, though, probably to the core of human, even primate, cognition (Land and Nilsson 2012).

8. This is not to suggest that blind people do not have cognition. The bodies and brains of blind people adapt processes that would respond to visual stimuli to other stimuli, such as sound and touch (Bedny, Pascual-Leone, and Saxe 2009).

9. For a great summary of the state of the art of neuromarketing, see Ariely and Berns (2010). They argue that much of the popular representation of neuromarketing is overblown hype and try to lay out some ethical guidelines for the emerging field to help it avoid a clearly ominous potential.

6 Intersubjectivity and Intimacy

> To achieve intimacy, one must first be oriented to value and seek closeness. Second, one must be able to tolerate, and even embrace, the intense emotions that are inextricably part of close relationships and be able to share emotional experiences freely. Finally, one must be capable of self-disclosure, mutual reciprocity, sensitivity to the feelings of the other, and concern for the other's well-being.
>
> —W. Andrew Collins and L. Alan Sroufe, "Capacity for Intimate Relationships: A Developmental Construction"

As we saw in the previous chapter, there is a paradox with celebrities and gods because we feel like we know them intimately when they are in fact strangers (Schickel 1985). We only triangulate with such characters through bright screens and lights. When triangulation is more local, we find animal minds, even human ones, no less difficult to understand and grow close to.

In this chapter, as a way of ending the book on a high note, I explore a topic that is perhaps the closest modern analogy to religion in its apparent irrationality: love and intimacy. I argue that keeping the Davidsonian levels of subjectivity, intersubjectivity, and objectivity distinct is a key part to understanding both religion and intimacy. I explore these levels in relation to the theory of nonviolent communication and conclude with a discussion of the original challenge to divine authority—the narrative about Adam and Eve in the book of Genesis.

How is intimacy relevant to religion? Aside from religion, some of the clearest examples of wishful thinking and paradoxes of irrationality in human life come in the context of love and intimacy. Intimacy involves a lot of necessary fictions, as William Shakespeare makes clear in his 138th Sonnet: "When my love swears to me that she is made of truth, / I do believe her, though I know she lies." Love and intimacy, like religion, are varieties of narrative fiction that we probably cannot live without. This was probably why at the end of his career William James eventually proposed intimacy “as a criterion for any acceptable metaphysics” (Proudfoot 2018, 108).

Following Davidson, I have argued throughout the previous chapters that interpretation, including interpreting something as religion, always takes place in the context of triangulation, where meaning is contextual and immanent. Information is carried in narratives, but narratives do not mean anything unless they are embodied, embedded, and enacted by agents participating in triangular interaction. The reason why I focus on intimacy is to emphasize that not all triangles are equal; intimacy is a concept that centers on the quality of triangles.

Intimacy thus relates to both religion and the study of religion. It is important to religion because people learn and engage with the semantic content of religion especially through intimate interactions. Put better, the semantic content of religion emerges through learning and engagement in contexts where people feel a sense of intimacy. Religious language likely helps human beings build in-group identities, but the main reason people build these in-groups is because they want intimacy with others. I suggest that approaching religion at this level, at the level of intimacy, is closer to the truth about the meaning and semantics of religion and thus to a science of religion.

Intimacy is important to the study of religion because when scholars see themselves as spectators outside of triangulation, their view of meaning tends to become distorted. If you want to know more about religion, discuss it with someone you care about. Try to avoid the spectatorial view; respect first-person authority (Gardiner and Engler 2018, 316–317).

I am not saying scholars must experience religion to understand it, and I am not saying scholars should give up on trying to understand religion objectively. I am saying we have neglected to theorize the intersubjective dimension of religion properly, and this has led to a failure to provide a coherent semantics of religion. In order to grasp the semantic content of religion, we have to view it in participatory, nonspectatorial terms. In the language of anomalous monism, this content is the level of the mental that is irreducible yet identical to the physical.

Subjective, Intersubjective, Objective

As we saw in earlier chapters, Davidson found that for pragmatic reasons it makes sense to attribute thoughts, a rich mental life, to nonhuman creatures in some cases because it is the only game in town. We also saw that he thought the ability to be truly surprised as well as having the four concepts related to language are necessary conditions for such thoughts (truth/error, names and predicates, truth-functional connectives, and quantification; see Davidson [2001b, 133]).

Though we can be close to animals and other living things who do not possess language in this Davidsonian sense, interacting with creatures who possess a rich semantic life has the potential for more or, at least, wildly different layers of intimacy. I do not think I need to have a conversation with my dog Kaja to feel close to her, but if Kaja and I were able to have a conversation in English, we could possibly grow even closer. This is complicated, though, because our conversations might also push us apart. Language can get in the way, but language also holds the potential for nuanced forms of intimacy.

Except for theological scholarship on human intimacy with superhuman agents of various kinds (Arendt 1996; Bradshaw 1997; Barthold 2000; Robert 2010), and research on attachment theory where superhuman agents can be havens of psychological safety (Kirkpatrick 2004, 61–65), the subject of intimacy has been mostly ignored when trying to account for, explain, or understand religion. I think this is unfortunate, because from the anomalous monist perspective, religion must start at the intersubjective level in our interactions with others. Thus, a discussion of intimacy provides an important key for understanding religion by disentangling the dynamic levels of subjectivity, intersubjectivity, and objectivity. The topic of intimacy is also important for understanding modern religions of "honest" communication, celebrity cults like that involving Joe Rogan, and the like. The type of Joe Rogan "bro spirituality" discussed in chapter 4 is very much about intimacy between males.

As we have seen, from a perspective that rejects the four dogmas of empiricism, we will have to approach the problem of subjectivity carefully. A classic question in the study of religion is the extent to which "religious experience" should be considered a legitimate object of study in the discipline. Scholars skeptical of this direction, such as Hans Penner and Nancy Frankenberry, have read Davidson's well-known essay "On the Myth of the Subjective" to argue that it is impossible to ground a science of religion on subjective experience (Frankenberry and Penner 1999b). The same critique applies to Thomas Nagel's attempt to lump mind and cosmos metaphysically together—that is, his view of consciousness conflates it with subjective experience. As we have seen, for Davidson, intersubjectivity is the basis for both objectivity and subjectivity, so it must be at the core of both the science of religion and consciousness. While I think Penner and Frankenberry are right, and even though Davidson called his essay the "myth" of the subjective, this does not necessarily mean any discussion of subjectivity is out of bounds. In fact, in the middle part of Davidson's career he developed the idea that there are three planes of interaction in his holism: subjective, intersubjective, and objective.

These three "varieties of knowledge" are not equal, and as long as one does not fall into the four dogmas of empiricism, it is possible to make sense of their interrelations. Davidson argued convincingly that subjective knowledge is rather special because we attribute mental states to ourselves without the benefit of public evidence (Davidson 1984, 1987, 2001b). In other words, the mental states we attribute to ourselves are most often not based on observation or reasoned beliefs but rather on our own (subjective) feelings. For example, we simply know or think we know that we hold certain mental states. This, however, is not how other people approach us. Others base their attribution of our mental states on their observations and interactions with us—on intersubjective evidence. They must do so because they have no access to our subjective feelings.

We have seen that Davidson thus privileges the level of intersubjectivity such that in order to give content to mental states, we have to already be language users. In situations where we attribute mental states to others, we base this on external evidence: their verbal and nonverbal behavior. Even the vocabulary for the mental states that we apply to ourselves ultimately derives from intersubjective relations. In other words, we learn to apply this vocabulary to ourselves at the same time that we apply it to others. But of course the perspective on our own states is different. This is what Davidson means when he says that the first person, when I speak as an "I," has a certain kind of authority in ascribing mental states to oneself (Davidson 1984). Subjectivity, which Davidson calls "irreducible singularity" (Davidson 2001b, 91), involves no triangulation, which is why it can lead to problems of rationality such as weakness of the will and self-deception.

Objectivity is different. It is based on intersubjective triangulation entirely. Objectively speaking, we learn about ourselves partly by standing outside ourselves and observing ourselves. This is not something we do in real time, but "offline," when we sit back and reflect on our actions and speech.

We have unique access to our own mental states, our own feelings and emotions, even though we might not have external evidence of these states. These states are real, and they are not necessarily internalizations of something external (as some versions of externalism would argue). With that said, however, precisely because such ascriptions are not based on reasoned evidence, they are less reliable than intersubjective ascriptions (Davidson 2001b). There is a lively debate in philosophy about which comes first, subjectivity or intersubjectivity (Zeedyk 2006; Kyselo 2014). From an anomalous monist perspective, it is the latter. We learn how to apply intersubjective terms to our internal subjective feelings over the course of our development. The intersubjective layer involves a relation between two or more embodied agents (and the world) in interaction (Bolis and Schilbach 2020). This is the space of second-person address.

The remainder of this chapter tries to delve a little deeper into the concept of intimacy. Since intimacy requires a sense of ownership of the subjective self, this can lead to problems within a Davidsonian framework, where the intersubjective level is prioritized. I think where Davidson's efforts fall short, they are picked up better in Marshall Rosenberg's theory of "nonviolent communication." This communication strategy does a better job integrating subjective, intersubjective, and objective levels in practice.

Nonviolent Communication

I have argued that triangulation is central to understanding religion. Davidson's holism starts with the fact that we do successfully communicate, or rather, when we do, our sentences are meaningful. Davidson, however, was never that specific about the quality of the communication. As we see in the quotation at the start of this chapter, which is an example of a typical attempt to define what we need to achieve intimacy, this is the aspect of meaningful content most relevant to the concept of intimacy.

There are obvious questions to raise about this form of holism: What is successful communication? What happens when communication is not successful? Davidson addressed these questions in a number of essays about malapropism, Joyce's *Ulysses* (Davidson 2004, 223), and other subjects. He argued that in triangulating, interpreters tend to jump through a lot of hoops in order to see speakers as communicating something. He rarely discussed the absolute limits of this process.

Davidson also rarely if ever discussed the role that emotions play in triangulation. Certainly, he would see emotions playing a rational role in communication. But what is left out of his account is the role that risk, vulnerability, trust, and other concepts that connect to emotion play in the intersubjective engagement with others. It is not clear how much these factors play in semantic content, but they clearly affect the interaction and therefore its interpretation.

Awareness of reasons—in particular, propositions concerning what oneself and others want to be true—is important for intimacy. It is something of a mantra for anomalous monists that reasons can be causes but causes cannot be reasons. This idea, by itself, puts anomalous monism seriously at odds with many of the new sciences attempts to explain human behaviors, because it means that in order to explain the things people do, we must attribute a certain mentality to them. The paradoxes that Davidson and Frankenberry find arise from a sense that something has gone awry in this process of attributing reasons.

However, as Marcia Cavell discusses, the attribution of reasons is limited if we do not take emotions and feelings into consideration (Cavell 1993). We cannot help but import some normative ideas about what we want and need as human beings into our theories of communication. I take a rather romantic view that humans, all else being equal and given the right circumstances, would rather act compassionately toward other living things. Most of the problems we get into come from the "all else being equal"; we live with inequalities in education, wealth, and child development, to name a few. Furthermore, acting compassionately toward members of an outside group and toward other animals is admittedly rather recent in the history of life.

To modify the anomalous monist view, I think we need something like Rosenberg's theory of nonviolent communication (NVC). Rosenberg developed this pragmatic model for communication as a way to resolve conflict and build dialogue. As with anomalous monism, one of the premises is that we act for specific reasons. In the language of NVC, we act on the basis of needful feelings. These feelings could equally be described as rational attitudes toward propositions. In other words, we act because we need certain things to be true. Rosenberg breaks our basic universal "needs" down to seven normative categories, as noted by Elizabeth Agnew: "physical nurturance, interdependence, integrity, autonomy, celebration, play, and spiritual communion" (Agnew 2012, 216). From an anomalous monist perspective, NVC encourages people to become more aware of the propositions behind attitudes generated from these norms. Ultimately, we are each responsible for meeting these needs for ourselves, but the paradox is that we cannot manage to meet our needs alone, and this is arguably where conflict and violence emerge. A core idea in NVC comes from Victor Frankl's horrid experience in Nazi death camps, where in the face of violence he maintained the "'last of human freedoms' … that even after everything has been stripped away from a person, what remains is her or his ability to choose an attitude in a given set of circumstances" (Sullivan 2007, 133).

For NVC, choosing attitudes is based on a process that begins by observing behavior or language that affects us; in the next step we are supposed to try to recognize our subjective feelings in that situation, negative or positive. A key step eventually is to see that we, not another person, are responsible for the feeling that arises. In other words, NVC asks us to take ownership over that feeling. The argument is not that Frankl is responsible for the evil actions against him, but rather that even in the face of such atrocity, he retains the freedom to choose how he responds to it.

Translating NVC into the language of anomalous monism, the idea is that others cannot cause or make us feel a certain way; *our* reasons can be the only causes of such feelings. To take a mundane example from Rosenberg, say you have a roommate who plays his music loud at night and keeps you awake. Violent communication involves making judgments about the person without first being aware of your own feelings and needs. Perhaps in the morning you say something passive-aggressive or tell your roommate that he is inconsiderate and he makes you angry. For NVC, no one can *make* you angry but yourself, based on how you react to certain events. You are responsible for your feelings and emotions. Perhaps it is true that he is inconsiderate, but telling him that in a violent way will not solve the problem. The point is that when we speak violently, we rarely get what we want.

Instead, the next step is to try to understand what met or unmet needs we have that are connected to such feelings. In our example, the loud music is making it difficult to get needed sleep. Finally, we communicate using “me messages.” Basically, we attribute these subjective feelings to ourselves and possibly make a request for a change in the objectively observed behavior. The “me messages” allow communicators to avoid the “estranged, spectatorial” point of view we saw in previous chapters that is so problematic and confusing, especially when it comes to understanding religion.

The basic outline, in a specific case, is this: “When you do such and such (if we can agree that you did), I feel a certain way.” A nonviolent communication regarding the loud roommate would then be something like “When you play loud music, I feel angry and I need x, y, and z. Please do not play music loudly at night.” Of course, there is much more to the method than this brief synopsis (Rosenberg 2003; Marlow et al. 2012; Suarez et al. 2014; Museux et al. 2016). As I see it, this is one of the best methods we have for disentangling subjective, intersubjective, and objective levels of communication, the “contingent and idiosyncratic net of wishes and beliefs” that make up the self for Davidson (Weber 2011, 12n31).

There will be limits to this type of communication (Flack 2006). If someone you are interacting with insists on harming you, it will be practically impossible to get what you want. Similarly, though branded as a form of judgment-free communication, this method does not mean communication must be uncritical; rather, it can be kind and critical at the same time. Criticism should be made at the end of the process on the basis of shared understanding. In this sense, the Quinean idea of *Gavagai* (Premack 1985; Malmkjær 2004, 402), which Davidson incorporated into radical interpretation and his Principle of Charity, needs more focus on feelings and emotions, which are cognitive and rational. In other words, radical interpretation and charity are usually framed at a basic level as triangular coordinating with the physical world, but, more importantly, communication cannot possibly get off the ground without coordination and recognition around basic feelings and emotions (Trevarthen and Aitken 2001; Trevarthen 2017). Thus, NVC points to a kind of principle of emotional charity at the core of intimacy. Religion, however we define it, probably has more to do with this level of communication than any other.

Another way to understand intimate interacting selves comes in the field of psychoanalysis, which has at times argued for an interpersonal and dynamic concept of the self within the background of an intersubjective world of emotions. Davidson only addressed this to a limited degree in his musings about Freud, probably influenced by his third wife, philosopher and psychoanalyst Marcia Cavell, known for her groundbreaking book *The Psychoanalytic Mind* (Cavell 1993).

Psychoanalysis is a serious attempt to articulate the subjective self, a topic on which many disciplines refuse or fear to tread. Though psychoanalysis is more than a form of talk therapy, critique has been leveled that the linguistic layers of psychoanalysis get in the way, rather than facilitate, realization and recognition of subjective states (Macmillan 1997). Another criticism is that psychoanalysis reduces psychological problems to language. It assumes that with enough talk, in principle, we can fight our way through neuroses. However, talk is often not enough. For some people it may help to give language and words to feelings, but to others this language may get in the way, and recourse to direct phenomenology of bodily feeling or behavioral modification may be a better way to realize and recognize subjectivity.

According to his small “intellectual autobiography,” Davidson began his romance with Cavell when their stars crossed in April 1984 in New Brunswick, New Jersey, at a conference dedicated to his work (Hahn 1999, 60). Davidson was then teaching at Berkeley and Cavell at SUNY Purchase. By June they had spent a week together in Venice and by July they were married. What a whirlwind it must have been. Cavell eventually left her position at Purchase to move to Berkeley. It was in these years in the 1980s that Davidson’s work shifted; he began his attempt to account for subjectivity within his own system, ultimately postulating three distinct and irreducible kinds of knowledge, three particular strange loops, necessary for human thought as we know it: “knowledge of the objective world … knowledge of the minds of others … and knowledge of the contents of my own mind" (Davidson 2001b, 87). The last is what especially interested psychoanalysts like Cavell.

Davidson called his philosophical approach "Spinozistic," because he considered himself an ontological monist while at the same time maintaining conceptual dualism (Hahn 1999, 63). As such, anomalous monism has been used as an antidote to phenomenologies that posit simplistic forms of dualism or a naïve relation between knowledge and experience. There are two sides to this. As I have discussed, Davidson is a monist in the sense that he does not recognize any ontological distinction between the mind and body, the soul and the body. They are one and the same. But his is also a more thoroughgoing kind of monism because he also rejects a simple distinction between self and world. We cannot stand outside ourselves to see the world; we are embedded. He did not advocate the self-certain subject so often criticized as a mirage of modernity (Foucault 1994). This is a self of misrecognition, a self that cannot feel intimacy because it cannot realize the dynamic between two interactively realized subjective selves.

Cavell uses Davidson as a starting point to try to rethink psychoanalysis from a monist position, one that does not (like Plato, she says) bifurcate the soul or self into a rational self and an emotional self. These should be integrated. She argues, among other things, that though emotions differ from beliefs or desires, they are similarly propositional (Cavell 1993, 146; Gardiner 2012). It is important to recognize that emotions can be propositional because this allows them to enter the holistic framework of reasoning that Davidson describes.

As noted, Davidson's musings on psychoanalysis came in the context of his writings about "irrationality"—paradoxes, incoherence, self-deception—the same phenomena we saw in chapter 1 that Frankenberry considered important for making sense of religion (Davidson 2004). Religion as a phenomenon takes place in the context of the narrative self, the self that tells fictional stories to oneself about oneself (Schechtman 2011; Hutto 2016). We play tricks on ourselves, often precisely because we are intersubjectively entangled. Demons come out, seeking to deceive you and others. They do the talking for you. They pull you into ruins and negative feedback loops. Since the intimate self is often a hidden self—conspiracy is often seen as one source of intimacy—these forms of thinking put pressure on Davidson's monism.

The core of the word "intimacy" involves a spatial metaphor of becoming closer within a space, deriving from the Latin word *intus*, meaning "within." In intimacy what becomes closer in space are these selves, paradoxical selves because they are subjective, intersubjective, and objective at the same time. Davidson thought the concept of the self was irreducible for precisely this reason: it could not reduce to the subjective self, or intersubjective relationality, or objectification.

Intimacy is not easy. It is precarious not only because it involves a constant effort to recognize and own the subjective self, but also because there is an additional layer of complexity where selves inevitably filter through an intersubjective prism. Intimacy may break down and lead to negativity. But we should not necessarily confuse negativity with a loss of intimacy. Intimacy requires a degree of negativity, discord, and pain. And without kindness, as we will see, intimacy can verge on torture, because the rawness of torture also involves a close dynamic of realized subjective selves. Negativity is something that must be moved through for intimacy to arise.

One of the most direct meditations on intimacy comes from Ziyad Marar (Marar 2014). He argues that it is a subtle emergence. We only feel intimate in brief, fleeting moments; it is a special thing. Marar enumerates four features, or what he calls "lenses," that he thinks characterize intimacy in its clearest cases. They are reciprocity, conspiracy, emotion, and kindness.

All four of these features are useful for my purposes. By reciprocity, Marar has in mind something like the notion of intersubjectivity. Intimacy is a dynamic between two people—no more, no less. Group solidarity has similarities to intimacy, but Marar thinks the most authentic form of intimacy is a form of self-discovery that takes place between two people.

By conspiracy, Marar means that intimacy involves keeping secrets. Intimates know things about one another that others do not. There is an inside and an outside, and those on the inside have privileged knowledge; there is an economy of information. In the Archaeological Museum in Naples there is the Gabinetto Segreto, or "secret room," which like the Secretum or secret annex at the British Museum houses all the artifacts deemed obscene by nineteenth-century eyes. Intimacy is like the Gabinetto Segreto, a secret room (figure 6.1).

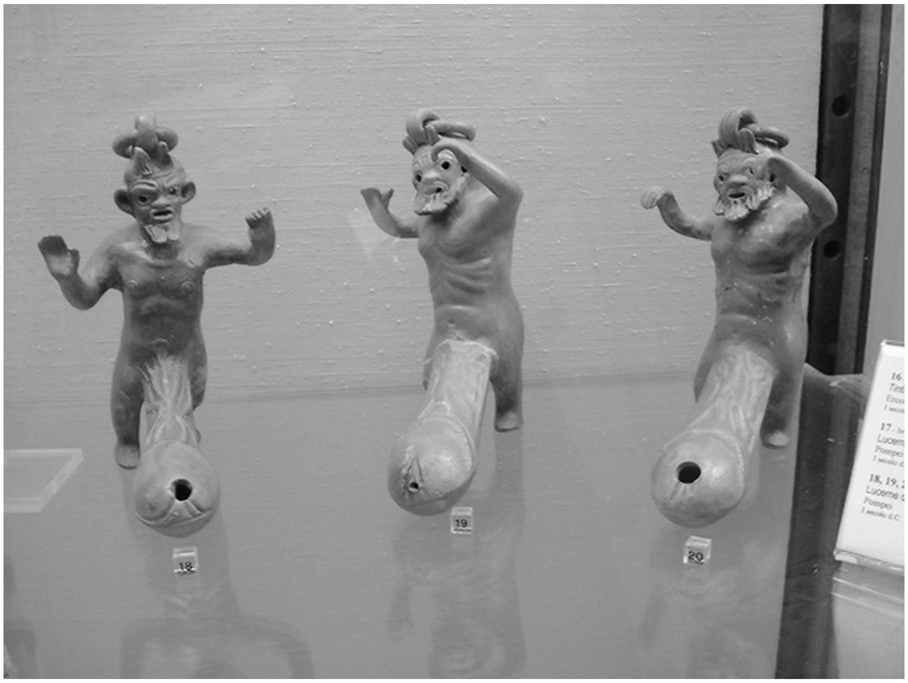

Figure 6.1
Votives from the Gabinetto Segreto of the Archaeological Museum in Naples (photo by author).

Marar has a whole chapter on “the kiss.” The kiss is intimate. Apart from sex, it is the closest thing to two selves experiencing the same thing. In biblical Hebrew, intimate knowledge comes through resolutely in the double meaning or ambiguity of the verb “to know,” which has both a cognitive and a sexual connotation. The book of Genesis has an intense meditation on this connection. It tells the famous story about the human expulsion from Eden after they ate from the “Tree of Knowledge of Good and Evil.” The main issue after they ate, the main knowledge they appear to then have obtained, was that they could see one another’s nakedness. What they knew, in other words, was that they were naked. God ends up punishing Adam, Eve, and the serpent. He makes Adam and Eve some clothes before he kicks them out of Eden. It is right after this point that we get the verse “The man knew Hava [Eve] his woman, so she conceived” (“conceived” is another word with cognitive connotations, at least in English).

וְהָ֣אָדָ֔ם יָדַ֖ע אֶת־חַוָּ֣ה אִשְׁתּ֑וֹ וַתַּ֙הַר֙ וַתֵּ֣לֶד אֶת־קַ֔יִן וַתֹּ֕אמֶר קָנִ֥יתִי אִ֖ישׁ אֶת־יְהוָֽה

w^{e}*hāʾāḏām yāḏaʿ ʾeṯ-ḥawwā ʾištô wattahar wattēleḏʾeṯ-qayin wattōʾmer qānîṯî ʾîš ʾeṯ-yhwh.* (Gen. 4:1)

Scholars have had some trouble tying together these two meanings, epistemological and sexual, but I think it helps to look at them through this lens of intimacy. Knowledge involves a kind of intimacy about a subject or about a person. Sex is often an incomplete way to intimacy, and of course one can have sex without intimacy. Nevertheless, naked sexual knowledge is often the most direct way to a sense of intimacy. Similarly, for the biblical mind the importance of sex is that it leads to multiplication, to procreation, to having children together, which is another source of intimacy.

The forms of voyeurism and celebrity noted in the previous chapter and by Schickel in his book *Intimate Strangers* lack Marar's third feature of intimacy, a mutual closeness and connection through emotions. These include both positive and negative emotions. Humor seems especially important to building such closeness. Expanding from Marar, we can say that the intersubjective reciprocity of the first feature of intimacy must extend to the domain of emotions. At the same time, emotions can only be recognized and owned by the subjective self. All emotions do not have to be shared, but there has to be a place for the pure expression of subjective feeling without it being filtered through the prism of intersubjectivity.

Marar's fourth feature is kindness. Without this he thinks we are left with something like torture. He uses the example of O'Brian in Orwell's *1984*, the torturer of the main character, Winston, with whom he has had many of the trappings of intimacy without kindness (Orwell 1953). Kindness, indeed, has its own pleasures (Phillips and Taylor 2010).

Marar's points are admittedly normative. I do not lay these features out in order to make a normative point—about what authentic intimacy is and how we can authentically reach it—but rather to give us some tools to think about the relation between intimacy and religion. Marar's book is based on some of the latest research about intimacy, most of which occurs in social psychology. In the surveys conducted, people say that vulnerability and communication are two keys to intimacy (Livingston 2004; Gerson 2009; Egeli et al. 2014; McKinnon and Greenberg 2017), and further, that people may have different experiences and expectations about intimacy depending on their sex, sexual orientation, and gender. This is naturally a very coarse and general statement. There are also vast similarities between the sexes. However, it seems clear that natural selection has led to some important sex differentiations given the different roles that men and women play in procreation.

It is a debated subject, but much of the research suggests that intimacy is more important for women (Laurenceau, Barrett, and Pietromonaco 1998; Reis, Clark, and Holmes 2004). More precisely, women and men have different types of intimacy; we can think of these as two attractors or poles, not necessarily something essential about men and women. In other words, there is the “male” mode and the “female” mode. Women experience intimacy by connecting and working through emotions and talking about them, while men more often describe intimacy as doing things together. Culture plays an important role here, but perhaps we can tentatively say that men gravitate to that form of intimacy because as the more autistic sex, the emotional world is more confusing to them. (For the debate around this, see Baron-Cohen [2010] and Baron-Cohen et al. [2011]). Men are often seen as fearful of intimacy specifically in terms of “responsiveness”—that is, men are often perceived as not responsive to the emotional world. Men may fear conflict in the emotional world; they may perceive it as a binary, as a kind of wall, a stop, not something to pass through to the other side (Ostow 2018).

Intimacy is not about losing yourself in the other. There is a romantic conception of the relation between two people that perhaps we get from that original dual monad, Adam and Eve. Both versions of the Genesis story lead to the same problem. In the priestly version of creation (Genesis 1), there is no sense that Eve comes from Adam’s bone but rather that man and woman are created in God’s image. God is both male and female at once. In the more poetic version of the story (Genesis 2–3), the first woman comes from the bone of the man. These two are one “flesh.” We repeat this idea in some Abrahamic marriage ceremonies.

Intimate Triangulation

Just as Cavell appeared to influence Davidson’s work, Davidson influenced Cavell’s. There were two important ways in which this took place: first, Cavell began to consider the psychoanalytic session as an important case of triangulation; second, she began to consider the role of triangulation in development.

By way of bringing this chapter to a close, I want to consider how we need to modify Davidsonian triangulation to account for intimacy. Clearly the notion of intersubjectivity is important. Intimacy involves someone sharing perspectives on oneself; in other words, part of it includes discovering new, even surprising, things about oneself and others. But other factors are not addressed in Davidson's theory. For example, as noted, an important factor in intimacy is responsiveness. Responsiveness is a quality of the interaction; it is a judgment or appraisal of the communication partner's reaction. This quality has the kind of nuance not found in Davidson's original idea. But what about the other aspects of intimacy?

Marar does not touch on two concepts that I think are essential for understanding intimacy. The first is perspective. As I have noted, intimacy differs depending on what perspective—first, second, third person (or other?)—one takes on it. On the face of it, this is a statement of the obvious. When looking at an intimate relationship, everything hinges on whether it is I, you, she, or he that takes part in the dynamic.

With this point in mind, we can say that at its most basic level intimacy is about the relationship between YOU and I, the second and first person, respectively (Buber 2000; Levinas 2019). The third-person spectatorial view, one that I think both discourse theorists and hard scientists take toward religion, misses something essential about communication and interpretation. Ironically, fiction, such as the genre of the "campus novel," often presents the role of intimacy in the life of academia in a more realistic way even than scholarship (Goldstein 1993; Kraus 1997; Lodge 2011; see also Eliade 1995; see also Maitraye 1995). Historical narratives, such as the snapshot of Davidson's biography I presented in this chapter, can capture the first- and second-person perspectives by referencing documents written from those perspectives at the proper place and time. Similarly, autobiography and memoir have the potential to capture intimacy because they are in the first person. Most historical narrative, however, is written in the third person.

These perspectives, but especially the relation between YOU and I, are not static; they are essentially temporal. They involve an active engagement with memories about oneself and about the intimate interaction over time. The agents taking part in an intimate connection often approach the interaction at different speeds in reflecting on the interaction, through various media, from different temporal perspectives. Thus, the dynamics of the interaction involve a compromise or balance of these speeds when easy, and temporal dissonance when strained. The third person, unlike the first and second, has the broadest perspective on temporality. This is possible by virtue of its narrative constitution. The third-person perspective allows for a certain type of memorializing that can make or break intimacy.

So the loop we need to make sense of both intimacy and religion is an emotional-cognitive one. It is dynamic and changing. It is intersubjective and embodied. The intimate self is a vulnerable self. It is a self taking part in an interaction. People are closed off from intimacy for this reason. It takes a certain degree of risk to put oneself out there (Mitkidis, Porubanova, and Roepstorff 2017). But intimacy is not the same as romantic attachment. It is not about losing oneself in the other. To the extent that we want to be dependent on the other, this dependence seems to stand in the way of intimacy. There should be space for the other to be a distinctive self (Tschacher, Rees, and Ramseyer 2014; Tschacher, Haken, and Kyselo 2015; Galbusera and Kyselo 2018).

In the poetic version of the Genesis story, one of the most influential narratives ever created, after Yahweh Elohim forms the man, he makes a garden and plants two trees there, the “Tree of Life” and the “Tree of Knowledge of Good and Evil.” He tells the man that he can eat from any tree except the latter; if he does eat from that tree, he will definitely die.

The man is lonely, and the animals in the garden do not make him feel any better, so Yahweh Elohim makes him a “helper” (*ʿēzer kᵉne(dô*—literally, a helper fit or in front of him). The woman is created (or “built”—*bānā*) from the man’s rib or bone (*ṣēlāʿ*). While the man is made from dust, the woman is made from the man. The man is “formed” (*yāṣar*), while the woman is “built.” Then the man riffs in verse about the woman being part of his flesh and bone and being made from him and for him. The narrator then explains that this is why a man leaves his parents and “cleaves” (*dāḇaq*) to his woman.

The pair are naked (*ʿārôm*) in the garden but are not ashamed. The next section begins with a play on the word “naked.” It points to the snake or serpent, who it says was craftier (*ʿārûm*, crafty, or wise when used positively) than all the other beasts. The word for snake, incidentally, is close to homophonous with the word for magic (*nāḥaš*). The serpent convinces the woman to eat from the “Tree of Knowledge of Good and Evil,” she convinces the man to do the same, and subsequently their “eyes are opened”; the pair realize that they are naked, and they cover themselves. Yahweh Elohim finds out about this when the man lets it slip that they know they are naked. And in perhaps the greatest example ever of throwing someone under the bus, the man blames the woman, who in turn blames the serpent. Yahweh Elohim curses all three and kicks the human pair out of the garden, after making (*ʿāśā*) them some clothes. The reason given for kicking them out is that Yahweh Elohim thinks Adam/man (this part of the verse ignores the woman) is becoming too much like “one of us” (*k*^{e}*ʾaḥaḏ mimmennû*), too much like a superhuman agent, and wants to avoid him eating from the “Tree of Life” and thereby living forever. Upon leaving the garden the pair immediately start making babies, and the genealogy of humanity begins in earnest.

While Adam is made from dust from the earth, Eve is made from Adam’s rib, from his chest cavity, from the bone of his bones. This, of course, is all from the patriarchal biblical perspective: the idea that the woman was put on this earth to keep man from being lonely, that woman is part of man as some form of ownership. She was basically a piece of him —literally taken out of him—his inner core, his substance.

As far as language is concerned, the man’s first act is to name the other animals. Yahweh Elohim brings the other animals in front of him, and he names them. In this case it is unclear if Yahweh Elohim knows the names beforehand or learns them from the man. As a second act, the man speaks in verse about the woman. So it appears that man is created already as a speaker of language, an impossibility in the Davidsonian account (Davidson 2004, essay 6). From a Davidsonian perspective, we would expect that moral emotions either proceed or emerge simultaneously with the ability to speak a language. The biblical story reverses this—not only Adam and Eve but also the snake are able to speak. Only after they eat from the magic tree are they endowed with discernment and understanding (*śāḵal*). Another way to translate this transformation is with the word “insight.” Once they eat from the tree “their eyes were opened” (*wattippāqaḥnâ ʿēnē*), whereupon they realize they are naked.

Perhaps where the Davidsonian and biblical accounts overlap is in the idea that Adam and Eve are not persons until we view them as free agents, capable of making decisions in a background of values. A clue to this point is that the pair do not unambiguously get their names until after they make that momentous choice. Without freedom, and the anomalism entailed in it, no meaningful sense can be made of sharing mental states with other agents. Without freedom, there is no intimacy, no religion.

Yahweh Elohim got upset with Adam and Eve for the same reason that he would subsequently get upset with those who build the Tower of Babel. The humans were trying to come too close, cognitively, literally, to the superhuman agents. At the urging of a crafty nonhuman person (the snake or serpent), they ate from a specific tree and gained certain types of mental states—normative ones about teleology, about good and evil. But the deity in this story was scared they would become more like him, so he banished them.

In the rabbinical tradition that interpreted these texts, this narrative marked one of the epochal changes or falls that culminated in the generation of dispersion from Babel in the narrative with which I started this book. These changes were not about original sin but continual falls. From another perspective these were not falls at all, but rather represent challenges to superhuman agents, efforts to become more like gods.

In both the Babel story we started with and the Adam and Eve story we have ended with, Yahweh Elohim does not want too much intimacy—cognitively, emotionally, spatially—with human beings. Perhaps like us this superhuman agent has intimacy issues having to do with challenges to his vulnerable authority.

Conclusion: On the Limits of the Unlimited

> A universal concept of religion represents a legitimate form of science fiction so long as it takes up fundamental facts of human action or social relations without making their specific shaping part of the definition.
> —Martin Riesebrodt, *Promise of Salvation*

In this book, I have presented a theory of religion inspired by Donald Davidson's philosophy of language and mind. One of Davidson's arguments is that the theories we use to interpret data around us and make it meaningful are underdetermined by that data. There are a potentially infinite number of such theories. This book represents one of those infinite number.

The main goal of the book has been to make sense of religion from a nonreductive naturalistic perspective by making explicit the metaphysical background of anomalous monism and applying it to central themes in religion. This background teaches us the paradoxical notion that the mental and physical are not reducible to one another but are nevertheless identical. In this sense, I propose a theory beyond heaven (the mental) and earth (the material). The course I have taken has been to begin broadly with what I see as central for making sense of religion: language. But language can mean a lot of different things to a lot of different people.

In the introduction and first chapter, I focused on what I see as most important about anomalous monism—namely, its holistic version of semantics, which points to the all-or-nothing nature of human thought and requires us to take religious language literally. Following Davidson, I argued that human-level semantic content can only emerge in robust triangular interaction between at least two speakers and the world they share. At the same time, holistic semantics is not all there is to language, so I introduced the term *natural information*, a central concept I have used throughout this book. Natural information has a much deeper genealogy than semantics, but this is a question that theology and religion mostly have pursued, less so science. These two poles of language, semantics and natural information, provide red threads that trace their way through the book.

In the second chapter, I discussed a central chunk of semantic content in religions, superhuman agents, and the perceived difference between fictional and religious agents. I argued that there is actually not much of a difference between them when we take a holistic perspective. In this way superhuman agents, whether superheroes, talking animals, aliens, or gods, all belong to the semantics of religion. There can be a conceptual difference between fictional agents such as Mickey Mouse and the usual gods, but this way of framing the issue puts things backward. From the perspective of triangulation, just as "meaning depends on successful interpretation rather than the other way around" (Cavell 2005, xv), in the same way nothing inherent or essential in a concept determines whether an agent is really fictional or really a god. Whether it is really fictional or really a god depends on successful interpretation, not the other way around.

In order to make this idea even more explicit, I moved on in the third chapter to a discussion of the economies of natural information. I traced such information back much further than we typically go, and in the process I called into question the anthropocentric view that human agency perception is all that special. In this sense, I argued that the attribution of agency and thus religion goes far back in evolutionary time, perhaps to the origin of life and even beyond. I presented a deep history of agency, arguing that there is a continuum, not a sharp line, between agency and superhuman agency.

In chapters 4, 5, and 6, I discussed triangulation in texts, technology, and intimacy, respectively. In chapter 4, I emphasized the importance of the triangular relation between the teacher and learner in the formation of semantic content. I went on to a discussion that explores where the creative impulses behind religion come from, the human potential to create worlds, with analogy to the ancient text *Sefer Yetzirah*, which has been understood as a tool kit for a creator to make universes and minds, using building blocks it calls ספר (SFR).

New religions are created all the time. In chapter 5 I discussed how modern technology has seized the means of creative production by figuring out how to manipulate natural information, leading to modern popular cults of celebrity. In the sixth chapter I discussed the challenges of intimacy, or authentic and real intersubjective engagement with others, from the holistic perspective of the previous chapters.

Giving a deep historical and evolutionary account of religion while at the same time holding on to a thoroughgoing holism is a difficult task. Nevertheless, a few central streams in particular have flowed throughout these chapters. First, the core of the theory is that religious language is a form of fiction and religious studies is a form of science fiction (see epigraph). Fiction does not necessarily mean false, for we share a massive bedrock of truths with one another, without which communication could never get off the ground. In order to understand something semantically speaking, we have to provisionally attribute truth (or falsity) to it, and understanding religious language is no different.

Second, agency is central to religious language. In tracing its natural history, I have tried to show that there is no hard-and-fast line between human and nonhuman agency where semantic triangulation starts to break down. Wherever one places that line, one is likely to start attributing falsity to the attribution of agency on one side or other. Disagreement about religion emerges at this minimal level. We humans triangulate in narratives, in texts and other media, and most importantly in our intimate relations with one another. This is where the content of religious language is to be found, immaterial meanings that are identical but not reducible to material events. Such language would not be possible without the natural history of life. Researching both in parallel, discovering the surprising places where they meet, should be part of the science-fictional study of religion.

Third, in order to understand religion, we must bring humanities and natural-science approaches into as much conversation as possible, while also recognizing we will never be able to completely reconcile them. The content of religion is found at the holistic level of semantics, where thoughts have a life of their own, and it will always have some disconnect from the lawlike levels of the natural sciences. The nearly impossible task is to make these conversations interesting and enlightening while at the same time giving due diligence to the state of the art in the respective fields in the humanities and natural sciences. Such a task requires often difficult collaboration and teamwork.

Fourth, religion arises to awareness depending on the perspective through which we look at it. Some scholars (and nonscholars), especially in the humanities, look at it from the subjective perspective; others, especially in the hard sciences, look at it from an objective, third-person perspective. Based on the work of Davidson, I argue that if we want to understand how religion means anything in the real world, we should be looking at religion from an intersubjective perspective.

In the Introduction to Theories of Religion course I teach every autumn, one of the things I try to get across to students is that the religious upbringing of a theorist tends to influence his or her scientific theorizing. For example, Durkheim’s Jewish background influenced his social theory of religion, while James’s Protestant background influenced his individualistic psychological theory. Theories always come from a particular perspective and are conditioned by the life history of the person doing the theorizing. We cannot detach the theory from the theorist, but that does not mean we should stop theorizing. In this book, I have tried to own how my own religious tradition, even though I am an agnostic, has influenced my theorizing.

The mythical narratives from Genesis that I begin and end with point to a central theme of this book. These stories, the Tower of Babel and Adam and Eve, show the dangers of coming too close to superhuman agents. For rabbinic interpreters of Genesis, explains Phillip Michael Sherman, “the rebellion at Babel is no different from and ultimately founded upon the same rebellious tendency present in Adam himself” (Sherman 2013, 325, Genesis Rabbah 38.9.2). In other words, the “sons of men” who built the tower were just as bad as Adam in their disobedience and failure to take responsibility for their actions. At the same time, their free choices in disregarding the law, the necessary anomalousness of free agency, is an important part of the stories.

Both stories thus warn against the hubris of human beings thinking they are gods. This brings us to the fifth main point of the book: we should be wary of the spectator view on communication, which I argued leads to a misguided view of semantic content. Instead, semantic content arises in immanent, contextual, enacted dialogue and conversation with other agents. Ironically, in another sense, wanting to become too much like the gods also leads to anthropocentrism, another error we should try to avoid when giving account of religion. Anthropocentrism can set human beings apart from other animals in unhelpful ways. If we are going to understand anything about ourselves as human beings, we must see ourselves as but one variety of animal species on earth, as rational animals.

The sixth main point concerns navigation. The night sky once served as a guide for us in time and space. I think the narratives our ancestors once told and the songs they once sang about the shapes, patterns, and regular motions up there were part of our early extended cognition that provided the scaffolding for human cognition to develop. With towers and other technologies, human beings have taken greater control over our own navigation, and thus over cognition. This has led to some of the stories about the challenges to superhuman agents with which I begin and end the book.

Cognition has led to hubris, especially when looking at religion. One antidote to such hubris is the seventh main point returned to throughout the book: the continuity between mind and life. Within this continuity, I argued that the concept of surprise is a central player, a kind of liquidity in the economy of information. Following Davidson, I found that surprise is central in accounting for human thought and humor. All this goes to the overall aim of the book, discussing the holistic semantics of religion run in parallel with the mind and life sciences, to see where the dynamic relations emerge. As such, I traced the relation between semantic narratives and natural information backward and forward in time, arguing that religions are more like organisms than they are like genes.

Why is this important? Why do we need such an approach? We are navigating this ship together, but science without the humanities is blind, and the humanities without science are rudderless. My hope is that this book can serve as inspiration, motivation, and example for future conversation between humanists and natural scientists. But this will require that individuals in these cultures want to engage one another. It will also mean changing the structure of our universities that all too often leads to rigid divides between academic cultures. I think such changes are required now more than ever, as humans build even bigger towers than Babel, attaining even more technological power over the natural world than we had in the past. In doing so, we have to recognize our limits.

Getting Along, with Methodological Conclusions

In light of these many theoretical implications, there are also some central methodological conclusions of my argument. Humanist-minded scholars of religion get some important things wrong about the harder sciences, and scholars in the harder sciences get some important things wrong about humanists. In terms of what the humanists get wrong, there is no reason to think that an evolutionary paradigm means that "human nature" is static and unchanging; in fact, quite the opposite is the case. Humanists have been partly justified in seeing this as a takeaway from natural-science approaches to religion because the latter are often wedded to the Pleistocene fallacy—the idea that our minds were mostly shaped by that one particular period of time in our evolutionary history. But this is wrong. If we want to understand human minds, we also need to go back much further, at least to the beginning of life. The Pleistocene was important, but there is no reason to think that this period in particular was more important than any other to the evolution of our minds.

Neither does evolution simply mean survival of the fittest. Fitness in complex organisms minimally entails two basic principles: survival and reproduction. The latter sometimes involves sexual selection, which brings about some very weird features in biology. The fittest organism is rarely the *Übermensch*, such that only the strongest and most selfish survive (Wilson 2010). Furthermore, evolution has no predictable telos because it takes place in open systems and moves only to local, not absolute, maxima. In other words, in a given local, ephemeral environment, some organisms are the fittest, but this is constantly changing; one day some of an organism's attributes make it fit, but the next day these same attributes may make it unfit. I bring this up because I think there is a propensity among humanists to understand evolutionary theory wrongly, as holding the mindset of social Darwinism from the nineteenth century.

In contrast to this outdated view, modern biology is well beyond the crass functionalism of social Darwinism and is making new discoveries all the time. Most biologists accept there is a great deal we do not yet know, for example, about the role of extrachromosomal DNA, regulatory RNA, and their relation to the seemingly worthless DNA ("junk DNA") in our genome (K. V. Morris and Mattick 2014; Wu et al. 2019; Cheetham, Faulkner, and Dinger 2020). Another example is recent work based in molecular biology arguing that memory emerged in the biological record when certain proteins began acting like viruses (Pastuzyn et al. 2018).

This point about misunderstandings between the "two cultures" relates to another difficulty in any interdisciplinary work between the humanities and hard sciences. The research is necessarily conservative: it must utilize methods and theories that are relatively firmly established in the various disciplines it brings together. The problem is that by the time research is brought into discussion with religion in a relevant way, it is usually outdated. This point could be applied to the whole subfield of cognitive approaches to religion, which have tended to incorporate the "machine" view of the mind, the mind as a computer, from very old versions of cognitive science and cybernetics. In my opinion, state-of-the-art cognitive science does not have a machine view of the mind anymore but has moved on to "4E cognition," which emphasizes the embodied, embedded, extended, and enacted aspects of cognition (Menary 2010; Madary 2011; Newen, De Bruin, and Gallagher 2018).

If we jump from the level of theory to the level of scientific practice on the ground, one of the beautiful things about hard-science approaches to religion is that at this point in time they are usually thoroughly interdisciplinary and collaborative. Most research published under its banner has a team of people from various fields working on it. If anything, this methodological approach exemplifies consilience on the ground, where scholars from various fields accustomed to different theories and methods manage to conduct experiments and write papers together. I would challenge more humanistically inclined scholars of religion to engage in more collaboration in this way. Such collaboration is certainly not easy, but it probably generates better, more nuanced scholarship. It is true that humanists do versions of this with conferences, grant project collaboration, and edited volumes, but more team-based core research and writing should be done in the humanities, despite its difficulties.

What practitioners of the hard sciences often get wrong (and humanists get right) is that they are rarely willing to take into account the constructedness and historical conditionality of science. In order to make future collaboration more likely, natural-science scholarship interested in religion should be more open to the idea from scholars of religion that not just religion, but also science, is a historically situated human phenomenon. Scholars in cognitive science are on the right track when they are open to the idea that science can be studied in a way similar to their approach to religion, as a natural phenomenon in the context of human evolution, a cognitive science of science (Thagard 2012). They are usually less inclined to enter into science-studies discussions about the discursive, strategic agent–oriented conditions of possibility of such discourse.

To take one example, it seems obvious that since males have been the ones predominantly steering the Neurathian scientific ship, this may have an effect on the choices made about what to study, and indeed how to study. Perhaps males and females would come up with the same exact sciences, but I doubt it (see Vandermassen 2005). In saying this I do not mean to endorse global skepticism or relativism, but merely to make the pragmatic point that the scope of science is limited and that if women controlled more of its institutional apparatus there would likely be a different focus and different discoveries (see Clough 2011).

Science cannot tell us ontological truths; these are ideas that are built into our methods and theories beforehand that only philosophy (or theology) has the tools to explore. Nevertheless, even from the science studies perspective I endorse, science is still the best way we have yet devised for deciding which of a number of competing evidence-based theories is provisionally true or false. Since the discovery of relativity and quantum mechanics, science has become increasingly strange, such that science fiction and religious fiction are mashing up (see figure 7.1). We can see this in the recent mixing of these genres in popular culture, such as the book/film *I Am Legend* (1954/2007) or the film *Spectral* (2016). For this reason, while the approaches of actor network theory (Bruno Latour), historical ontology (Ian Hacking), and genealogy (Michel Foucault) have basic affinities with my approach, the best way to describe anomalous monism from a science-studies perspective is as a form of “flat-ontology.” This stance basically says that despite cultural constructedness, everything is real: humans are real and consciousness is real. Knowledge steadily rolls back on itself like Hillalum’s cylinder seal noted in the introduction, but when we press it out, it looks like heaven and earth are disconnected.

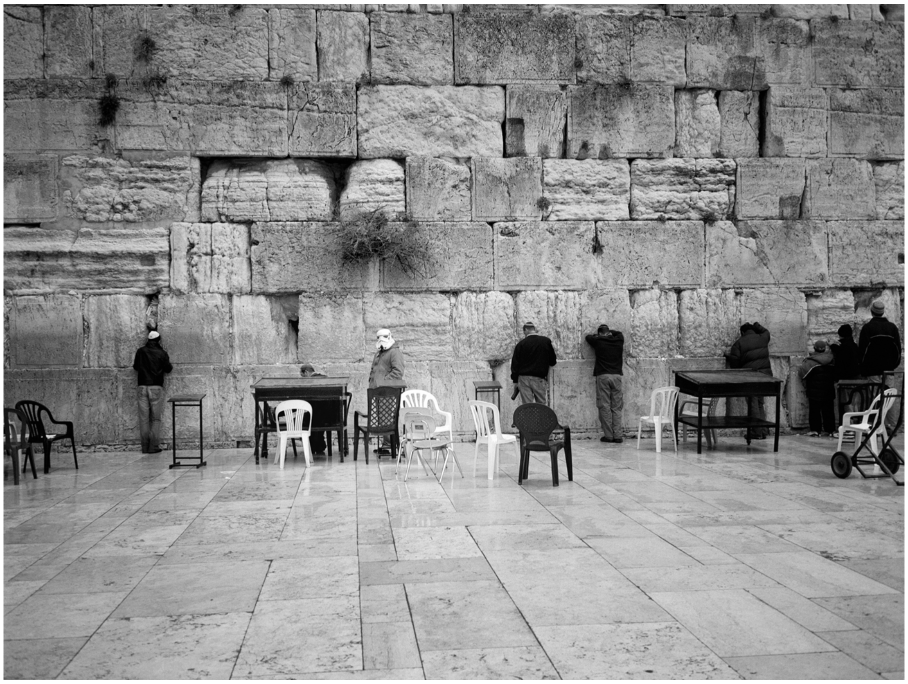

Figure 7.1
Photo entitled *Guns and Moses*, by former Berlin-based artist Daniel Josefsohn.

As part of this science-studies background, we can return to the metaphysical challenge from anomalous monism. Most hard-science approaches to religion are dominated by an undisclosed implicit metaphysic inherited from Protestantism. The field is mostly made up of white men from this cultural background. Perhaps this is true of European science in general, and for obvious reasons. The metaphysics says there is an essential ontological difference between the mental and the material. Since there can be no ghosts in the machine, we must ignore ghosts entirely and focus only on the machine (Modern 2021). In this book I argue that the ghosts, though fictional, are much more interesting. This book tries to imagine what a scientific approach to religion would look like with a different metaphysics.

Natural-science approaches to cognition have the potential to aid scholars in the humanities, whether they study ancient or modern texts, since texts are products of human psychology. In the same way that scholars of literature and art have been receptive to various theories about human psychology, from Plato to Freud, I think any scholar working with products of human imagination and creativity should also be receptive to this new brand of cognitive and evolutionary psychology. This new brand states that minds are not temporally static, but rather they have an evolutionary history that stretches back to the origins of life. Two goals, among a number that shaped minds over these millions of years, are survival and reproduction. Minds try to keep themselves going, they want to feel safe, and they want intimacy. Minds devise strategies with respect to these goals.

Up until this point there has largely been a one-way street of usage where scholars in the hard sciences employ humanists to conjure a bit of data from their fields that scientists can use for their own empirical purposes. Their purposes will be quite different from those of humanist scholars working with ancient and modern texts. I think the next phase should involve humanist scholars opening the street to two-way traffic. This requires that humanists read as much from the harder sciences as they possibly can. On the other side, my argument involves taking the “scientific” content of ancient texts, and ethnoscience in general, more seriously (Ellen 2020; Bender and Beller 2020). Humanists have been studying cognition for thousands of years, and we should not just abandon that tradition because something new comes along.

The basis of objective facts is intersubjective triangulation, but there are limits on the capacity of intersubjective triangulation because of the necessary incommensurability of the vocabulary we use when we describe things in psychological versus physical terms. When scientists treat animals, including humans, as machines, they are forgetting this incommensurability. However, there is no pregiven place where the incommensurabilities will lie; we have to discover them ourselves. In this sense, conceptual dualism should not prevent us from having interdisciplinary conversations. So while some scientific practice and theorizing must accept the conceptual distinction between the mental and physical, the same need not apply to our reading practices and conversations. Our reading practices and conversations should not distinguish between the natural sciences and humanities, thus privileging one over the other.

In order to bring these forms of scholarship together, a time-out in the culture war is urgently needed. The enemies are misplaced for both scientific reductionists who complain about the difficulty of understanding “postmodernism,” and humanists who complain about the politics of science (see Slingerland 2008a, 143; F. Curtis 2010). With education and science both under attack in the current geopolitical atmosphere, we should look to our shared commitment to knowledge, rather than allow outside forces to divide and conquer academia. If you look hard enough you can find places where humanists, engineers, biologists, analytic and continental philosophers, and psychologists of all stripes are working together. Maybe you will find some people whose politics you distrust, but you can definitely find some common political ground with a few.

However, there are reservations. The old way of doing cognitive science will not cut it anymore. Any form of it that regards the content of the mind as epiphenomenal to the real stuff should be disregarded. Similarly, any form that divides the world into untheorized dualist categories should be questioned. At the same time, there will be a limit on how far consilience can take us. I have argued that a Davidsonian approach takes us very far in the right direction, especially when it comes to the implications for the study of religion. Religion grows out of the universe, but in order to make sense of it we have to recognize the paradox that it is both mental and material, or perhaps neither, but certainly beyond heaven and earth.

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